INTRODUCTORY STATEMENT

The outstanding feature of the introductions included in this inventory is the relatively large proportion of forage plants, cereals, and vegetables contributed almost entirely by representatives of the bureau traveling abroad or by foreign agricultural institutions with which the Office of Foreign Plant Introduction has contacts.

H. L. Westover, of the Office of Forage Crops, made a trip to Argentina and Chile with the particular object of studying the culture of alfalfa. Extensive collections of plant material were made in those countries by Mr. Westover, not only of local strains of alfalfa but also of cereals, native grasses, and leguminous forage plants.

H. L. Shantz, of the Office of Plant Geography and Physiology, whose trip to Africa for the African Educational Commission was mentioned in the preceding inventory, continued his travels in that continent during this period, and sent in several more shipments of plant material which included native forage plants, sorghums, and other cereals and a considerable number of shrubby and herbaceous ornamentals.

While carrying on agricultural explorations in Yunnan, southwestern China, for the National Geographic Society, J. F. Rock, a collaborator of this office, made a special collection of native strains of beans and peas (Nos. 61018 to 61038). This collection should prove of special interest to vegetable breeders. A similarly interesting collection of local varieties of beans was received from George H. Winn, of Taiku, Chosen (Nos. 61039 to 61054).

Further shipments of local strains of crop plants were received from Dr. N. I. Vavilov, Director of the Bureau of Applied Botany and Plant Breeding, Leningrad, Russia. These included a series of wheats (*Triticum* spp., Nos. 61101 to 61198), a series of barleys (*Hordeum* spp., Nos. 61506 to 61592), and a small series of cottons (*Gossypium* spp., Nos. 61696 to 61714). Many of these strains originated in parts of Russia where climatic conditions are not favorable for growing crops, so that this material should prove unusually valuable for extending the range in this country of the crops represented. These same observations might also apply to additional shipments of plant material received from Prof. K. Murashinsky, of the Siberian Agricultural Academy, Omsk, Siberia. Grasses and forage plants constitute the greater part of Professor Murashinsky's contributions. For the benefit of forage-crop specialists of the
bureau who are carrying on experiments with small-seeded strains of chickpeas as a stock feed in the Southwest, material was introduced from a number of agricultural institutions in India (Cicer arietinum, Nos. 61066 to 61073; 61074 to 61081; 61082 and 61083; 61356 to 61365).

Seeds of a number of rubber-producing plants, introduced for bureau specialists seeking new sources of rubber, were received in a shipment from Alleyne Leechman, director of the Biological and Agricultural Institute at Amani, Tanganyika Territory, Africa. Among these may be mentioned Castilla elastica (No. 61453), Funtumia elastica (No. 61491), Landolphia kirkii and L. stolzii (Nos. 61492 and 61493), Manihot glaziovii (Nos. 61496 and 61497), and Mascarenhasia elastica (No. 61498).

Of especial interest to fruit breeders should be a prune (Prunus domestica, No. 60973), very similar to the French prune in character of fruit, which thrives in the latitude of Washington, D. C. Such a tree is growing in the garden of Dr. Aleš Hrdlička in Washington, and bears large crops each fall. The tree came originally from Czechoslovakia.

A new hybrid peach (Amygdalus persica × persica nectarina, No. 61302) originated at the Plant Introduction Garden, Chico, Calif., by hybridizing with foreign material gives promise of being a good home fruit. The round, light greenish yellow clingstone fruits, 2 inches in diameter, have white, firm, juicy flesh of a pleasing peachy flavor.

The botanical determinations of introductions have been made and the nomenclature determined by H. C. Skeels, and the descriptive matter has been prepared under the direction of Paul Russell, who has had general supervision of this inventory.

Roland McKee,
Acting Senior Agricultural Explorer in Charge.

Office of Foreign Plant Introduction,
Washington, D. C., August 19, 1926.
INVENTORY

60957. **Prunus canescens** Bois. Amygdalaceae.
From Loiret, France. Seeds presented by L. Pardé, Directeur des Écoles des Barres, Nogent sur Vernois. Received September 8, 1924.
A shrubby cherry from Szechwan, China, with attractive, dark orange-brown bark and very hairy leaves and stems. In habit it is rounded and bushy and about 7 feet high. The clustered rosy white flowers are exceedingly fragrant, but fall quickly from the leafless branches. The smooth, red fruits, half an inch in diameter, have a pleasant, acid flavor.

60958. **Hibiscus cannabinus** L. Malvaceae. Ambari hemp.
From Pretoria, Transvaal, Union of South Africa. Seeds presented by I. B. Pole Evans, Division of Botany. Received September 8, 1924.
Introduced for testing by fiber specialists.
A prickly-stemmed plant 6 to 8 feet in height, cultivated throughout India and elsewhere in the warmer parts of the world for its fiber, which is used as a substitute for hemp. The fiber is soft, white, and silky and is considered by some authorities to be more durable than jute for coarse textiles.
For previous introduction see S. P. I. No. 55481.

60959. **Andropogon saccharoides** Swartz. Poaceae. Silver beard grass.
From Sucre, Buenos Aires, Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.
April 5, 1924. This grass is very abundant west of Buenos Aires; it apparently is not relished by stock except when young.

60960 to 60971.
From Peking, China. Seeds purchased from Rufus H. Lefever, Presbyterian Mission. Received September 12, 1924. Notes by Mr. Lefever.

No. 1. Nay shou do tzu (small black beans). These are boiled soft and sugar added to make a sweet cake.

60961. **Phaseolus aureus** Roth. Fabaceae. Mung bean.
No. 12. Starch is obtained from this for stiffening clothes and for eating like vermicelli.

60962 and 60963. **Pisum sativum** L. Fabaceae. Pea.
60962. No. 7 A local variety.
60963. No. 9. A local variety.

60964 to 60970. **Soja max** (L.) Piper (**Glycine hispida** Maxim.). Fabaceae. Soy bean.
Local soy-bean varieties.
60964. No. 2.
60965. No. 3. **Nay do**. Fed to animals.
60966. No. 4.
60967. No. 5. **Li lang do**.
60968. No. 6. Sprouted and stewed with meat.
60969. No. 8. Used as flavoring for food.
60970. No. 10. **Huang do** (yellow bean). Used as flavoring for food.

No. 11. Stewed and eaten with rice or millet.

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1 It should be understood that the names of horticultural varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the Office of Foreign Plant Introduction; further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American trade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural nomenclature.

It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible identification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the specific identifications therefore must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from this office, herbarium specimens of leaves and flowers should be sent in so that definite identification can be made.
60972. **Attalea cohune** Mart. **Phoenicaceae.**

*Cohune.*

From La Providence, Chiapas, Mexico. Seeds presented by Dr. C. A. Purpus. Received September 15, 1924.

The cohune is a magnificent feather-leaved palm, native to the West Indies and Central America, which reaches a height of 40 feet, with leaves about 20 feet long, produced abundantly at the top of the trunk. The yellowish yellow flowers are borne very freely, and the ovoid fruit, 2 to 3 inches long, contains the seed or nut, which yields an oil of considerable value. According to a statement published in Commerce Reports, May 9, 1919, this oil is of high quality, finds a ready sale for cooking purposes, and is suitable for any use to which a good cooking oil may be applied.

For previous introduction see S. P. I. No. 54017.

60973. **Prunus domestica** L. **Amygdalaceae.**

*Prune.*

From Czechoslovakia. Budsticks presented by Dr. Aleš Hrdlička, United States National Museum, Washington, D. C. Received September 15, 1924.

Some years ago Doctor Hrdlička received from Czechoslovakia a shipment of trees and shrubs. These were planted on Tilden Street, Washington, D. C. One of the trees, a Prunus, shown such value that Doctor Hrdlička has called it to our attention with the recommendation that it be propagated and given wide distribution in this part of the United States.

This prune, from specimens which we have examined recently, appears very similar to the French prune in character of fruit. The latter does not succeed in the climate of Washington, whereas Doctor Hrdlička's tree bears heavy crops annually, and the fruit seems almost immune to the attacks of curculio and other pests. The ripening season is September and October.

60974. **Eugenia curranii** C. B. Robinson. **Myrtaceae.**

*Lipoti.*

From Manilla, Philippine Islands. Seeds presented by Adn. Hernandez, Director, Bureau of Agriculture, Received September 16, 1924.

The lipoti is a handsome Philippine tree which is described in the Philippine Agricultural Review, volume 8, as a vigorous tree about 30 feet high, with a grained trunk and tortuous branches, and dark-green, shining leaves. The fruits are in clusters of 20 to 50 on the bare boughs or between the leaves on the larger twigs: the individual fruit is about the size of a grape, with thin, smooth, dark-red skin, and white, dry, crisp flesh with a flavor like that of the crab apple. The seed is comparatively large. The fruit is probably best suited for making preserves and jelly.

For previous introduction see S. P. I. No. 51201.

60975 to 60982. **Dolichos lablab** L. **Fabaceae.**

*Hyacinth bean.*

From Salisbury, Rhodesia. Seeds presented by H. G. Mundy, Chief Agriculturist, Department of Agriculture. Received September 23, 1924. Notes by Mr. Mundy.

All of these varieties are of the bush type except Maclean's [S. P. I. No. 60978] and McGillivray's [S. P. I. No. 60977].

60975. **Gonudzu.** A native variety with rather small, white seeds.

60976. **Lablab stringless.** A variety having medium-sized white seeds.

60977. **McGillivray's.** The khaki-brown seeds are medium sized.

60978. **Maclean's.** A variety with large, yellowish white seeds.

60979. A variety with purple vines and leaves and dark-purple seeds.

60980. **Thurgarton.** A variety with large, brown seeds.

60981. An imported, white-seeded variety similar to Gonudzu [S. P. I. No. 60975].

60982. **Woodford's.** A variety with small, brown seeds.

60983. **Prunus glandulosa** Thunb. **Amygdalaceae.**

From Rochester, N. Y. Budwood presented by William L. G. Edison, in charge of the herbarium, Department of Parks. Received September 19, 1924.

This was grown from seeds originally brought from Manchuria by C. S. Sargent. The shrub, 15 to 20 years old, is about 5 feet high, and the fruit is the size of a large sweet cherry. (George M. Darrow, Bureau of Plant Industry.)

This pink-flowered Chinese shrub, often grown as an ornamental, bears abundant fruits, with a fresh acid flavor, which make excellent preserves.

For previous introduction see S. P. I. No. 54028.

60984. **Attalea cohune** Mart. **Phoenicaceae.**

*Cohune.*

From Summit, Canal Zone. Seeds presented by Holger Johansen, Agronomist, Plant Introduction Garden. Received September 19, 1924.

For previous introduction and description see S. P. I. No. 60972.

60985 to 60987. **Colocasia spp.** **Araceae.**

*Taro.*

From Tithkaveka, Ratorang, Cook Islands. Tubers presented by Capt. J. D. Campbell. Received September 17, 1924.

Three varieties of taro introduced for cultural tests and comparison with taros now grown in the Gulf States.

60985. **Taro kerekere.**

60986. **Taro simoa.**

60987. **Mixed varieties.**

60988. **Salacia sp.** **Hippocrateaceae.**

From Akkra, Gold Coast Colony, Africa. Seeds presented by W. S. D. Tushope, Director, Agricultural Department. Received September 23, 1924.

The roots and stems of this shrub, known to the natives of the Gold Coast Colony as "tetso," are said to contain a rubberlike substance, according to the Bulletin of the Imperial Rubber Bureau, London, for 1912. The plant has been introduced for testing by rubber specialists.
60989. ZEA MAYS L. Poraceae. Corn.
From Guasave, Sinaloa, Mexico. Seeds presented by F. W. Smith. Received September 15, 1924.
A variety of red sweet corn, introduced for testing by corn specialists.

60990 to 60999. TRITICUM spp. Poaceae. Wheat.

From Maison-Carree, Algeria. Seeds presented by the governor general, Institute of Agriculture. Received May 21, 1924.

From Guasave, Sinaloa, Mexico. Seeds presented by P. J. Westover, Bureau of Plant Industry. Received July 2, 1924.

From Chile. Collected by H. L. Westover, Bureau of Plant Industry. Received July 2, 1924.

Santiago. June 11, 1924. Scions of a variety supplied by Señor Comacho, at the Quinta Normal; said to be very resistant to the woolly aphis. The moderately large fruit is yellow and of fair quality. (Westover.)

JULY 1 TO SEPTEMBER 30, 1924 5

61000. ULMUS PUMILA L. Ulmaceae. Chinese elm.
From Nanking, China. Seeds purchased from Dr. J. H. Kelso, College of Agriculture, University of Nanking. Received July 11, 1924.
The Chinese elm, originally introduced some years ago, is proving a valuable acquisition to the semiarid regions of this country because of its resistance to alkali, drought, and extremes of temperature. As a windbreak and ornamental shade tree it has become popular in regions where other shade trees do not thrive.

61001. COCONEASTER SALICIFOLIA RUGOSA (E. Pritz.) Rehd. and Wils. Malacese.
A very handsome Chinese shrub with long pendulous branches and wrinkled, narrow leaves with the lower surfaces covered with down. The small, scarlet berries contrast very effectively with the autumnal tints of the foliage.

61002 and 61003.
From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

61004 and 61005.
From Chile. Collected by H. L. Westover, Bureau of Plant Industry. Received July 2, 1924.

61006. PHAEOLUS SEMIERECEPTUS L. (Pyrea eae L.) Malaceae.
Introduced for testing by forage-crop specialists.

61007 and 61008. PHASEOLUS CARRALIA L. Bertoni bean.
No. 169. May 11, 1924. Collected at Yerba Buena. (Cross.)
For previous introduction see S. P. I. No. 41882.

61009. POLYGALA BUTYRACEA Heckel. Polygalaceae.
Some of the more primitive tribes of West Africa have cultivated this species, probably since ancient times, for food. It is an annual plant about 7 feet high, with hairy leaves, large yellowish flowers, and black, cylindrical seeds nearly a quarter of an inch long. It is for the sake of these seeds, which are olaginous and very nutritious, that the plant is grown. Although the yield is not great, this is compensated for by the high food value of the seeds. The cultivation of the plant simply for the oil contained in these seeds would not, however, be profitable. (Chevalier.)

61010. FIGUS sp. Moraceae.
From Manila, Philippine Islands. Seeds presented by P. J. Wester, Bureau of Agriculture. Received July 2, 1924.
This, as this undetermined species of Ficus is known here, is the best fruit I have tasted in this genus next to the cultivated fig. It does not, of course, compare with the fig, but is worth trying where figs cannot be grown for climatic reasons, and also for crossing with the fig to obtain varieties for tropical climates too trying for the fig.
The tree is upright and of medium size. The fruits are produced in short racemes on the trunk from the ground up and on the stouter branches, and are about 1 inch in diameter, fleshy and juicy, very
sweet for a wild fruit, with the characteristic flavor of the cultivated fig. Though the tibig has fruited in Manila, the tree does best in a fairly moist climate with the rainfall equally distributed throughout the year. It is probably very tender. (Wester.)


From Changli, Chihli, China. Seeds presented by C. F. Chou, Methodist Episcopal Mission. Received July 8, 1924. These are planted in April, ripening in August. They grow best on black or yellow clay soil, with good drainage. (Chou.)

61011. *Ch'ing Pi Gat* (green bean).
61012. *Er* (yellow bean).
61013. *Kwan Tung* (small bean).
61014. *Ta Bi Mei*.

61015 to 61017. *LANDOLPHIA* spp. Apocynaceae.

From Zomba, Nyasaland Protectorate, Africa. Seeds presented by E. J. Wortley, Director of Agriculture. Received July 2, 1924. Several species of Landolphia contain more or less rubber in the latex, and these listed below are introduced for testing by rubber specialists.

61015. *LANDOLPHIA PARVIFOLIA* Schum. This is described by Otto Stapf (Thiselton-Dyer, *Flora of Tropical Africa*) as a much-branched, climbing shrub, with small, oblong leaves and small, pale-yellow or white flowers in small, dense clusters. The greenish purple fruits, about 2 inches in diameter, have a smooth, thick rind.

61016. *LANDOLPHIA* sp.
61017. *LANDOLPHIA* sp.

61018 to 61038—Continued.

61018 to 61020. *DOLICHOS LABLAB* L. Fabaceae. Hyacinth bean.

61019. No. 1. *Yuanmao district*. Hung Pin bean (red thin bean).

61021 to 61033. *PHASEOLUS* spp. Fabaceae.


No. 7. *Penchuan district*. *Si Lue* bean (light-green bean).

61025 and 61026. *PHASEOLUS COCCINEUS* L. Scarlet Runner bean.


61027. *PHASEOLUS LUNATUS* L. Lima bean.


61029. No. 10. *Chaofung district*. *Su Ch'i* bean (four-season bean).
61030. No. 14-B. *Chengkuan district*. *Ta Pai* bean (large white bean).
61032. No. 20. *Fengyi district*. Small white bean.


61035. No. 5. *Hsinping district*. Ta Lu bean (large green bean).
61036. No. 4. *Fumin district*. Sung Tzu bean (pine seed bean).


No. 11. *Fumin district*. *Tan* bean (egg bean).

61039 to 61056—Continued.

61039 to 61056. From Taiku, Chosen, Japan. Seeds presented by George H. Winn. Received July 2, 1924. Introduced for specialists engaged in experimenting with various types of beans.

61039 to 61044. *PHASEOLUS* spp. Fabaceae.


61039. No. 1. *Ordinary red "pat."*
61040. No. 2. *White "pat."*
61041. No. 7. *Fifty-day gray "pat."*


No. 4. *Very small green "pat."*
61039 to 61056—Continued.

61043. PHASEOLUS CALCARATUS Roxb.
Rice bean.
No. 5. Very small red "pat."

61044. PHASEOLUS VULGARIS L.
Common bean.

61045 to 61054. SOJA MAX (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean.

61048. No. 3. Larger green.
61049. No. 2. Ordinary white.
61050. No. 9. Small black.
61051. No. 4. Small gray.
61052. No. 6. Very small white.
61053. No. 1. White (largest variety).

61055. VIGNA CYLINDRICA (Stickm.) Skeels. Fabacese. Catjang.
No. 3. Small black "pat."

No. 6. Mottled red "pat."

61057 to 61060.
From Richmond, Victoria, Australia. Seeds presented by F. H. Baker. Received July 1, 1924.

61057. ELAROCARPUS CYANEUS Alt. Elsecarpacese.
As an ornamental tree for tropical and subtropical regions this Australian species shows considerable promise. In its native habitat it sometimes grows 60 feet high, with narrow, acuminate, prominently veined leaves, and cream-colored, fringed flowers in loose clusters a little shorter than the leaves. The fruits are globular, blue drupes.

For previous introduction see S. P. I. No. 44849.

61058. HYMENOSPORUM FLAVUM (Hook.) F. Muell. Pittosporaceae.
An ornamental evergreen shrub or tree, sometimes becoming 50 feet high, from Australia. The leaves are up to 9 inches long, and the fragrant flowers, yellow marked with red at the throat, are over an inch across. Its symmetrical pyramidal habit and rapid growth make it promising as a street tree for the Gulf States and California.

61059. INDIGOFERA AUSTRALIS Wild. Fabaceae.
Indigo.
An interesting shrubby indigo, native to Australia, and probably suitable for growing as an ornamental in the warmer parts of the United States. It is an erect, branching plant 2 to 4 feet high, with very attractive foliage and dense or loose clusters of showy red flowers.

For previous introduction see S. P. I. No. 56575.

61057 to 61060—Continued.

This evergreen shrub is one of the most abundant in New Zealand; it is of compact, bushy habit, sometimes becoming 30 feet high. The leaves are hard, leathery, and sharp pointed, and the white or pink flowers, borne in great profusion, are about three-fourths of an inch across. When this shrub is in bloom the entire region appears as if covered with snow. The leaves are very aromatic, for which reason they have sometimes been used for making tea.
For previous introduction see S. P. I. No. 44849.

61061 and 61062. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.
From Copenhagen, Denmark. Seeds collected by G. C. Edler, United States Department of Agriculture. Received July 8, 1924.
Local red-clover strains introduced for testing by agronomists.
61061. G. C. E. No. 12.

From Palembang, Sumatra. Seeds presented by the Government Botanic Garden. Received July 15, 1924.
Tree No. 148-E. Collected April 20, 1924, at Palembang, Sumatra.
This species is of the 2-seeded to 3-seeded type and thus presumably one with edible nuts, since the other three species which I know from this region with more than one seed in a bur are edible. The nuts resemble somewhat those of Castanopsis sumatrana, but are of some other species, and very different from any the department is now growing. (Carl Hartley, Bureau of Plant Industry.)

From Manila, Philippine Islands. Seeds presented by Don D. Strong, Acting Director, Bureau of Agriculture, at the request of P. J. Wester. Received July 11, 1924.
A huge and remarkably handsome, quick-growing tree, attaining a height of 120 feet or more, with a clear, smooth trunk, and beautiful, fine-feathery, pinnate leaves. Native to Malaya, Burma, etc. It has been introduced into and become well established in Ceylon, thriving in the moist low country up to 2,000 feet. The long pods, which grow in clusters, contain a quantity of white, powdery, farinaceous substance. The tree is easily propagated by seed.

From Bogota, Colombia. Seeds presented by F. L. Rockwood. Received July 17, 1924.
To be grown for plant breeders experimenting with small fruits.
These came from the best-looking fruits I have ever seen in the Bogota market. The original source was a barranca near Facatativá, in a place sheltered from the wind. They were from 1 1/2 to 1 3/4 inches long, rather triangular, and of fine appearance. (Rockwood.)

61066 to 61073. CICER ARRIETINUM L. Fabaceae. Chick-pea.

From Pusa, Bihar, India. Seeds purchased from A. S. Singh, imperial agriculturist, Agricultural Research Institute. Received July 7, 1924.

Small-seeded strains introduced for trial as stock feed in the southwestern United States.

61067. Gram Pusa 7.
61068. Gram Pusa 23.
61069. Pusa Farm selection 3.
61070. Pusa Farm selection 11.
61071. Pusa Farm selection 15.
61072. Pusa Farm selection 16.
61073. Pusa Farm selection 17.

61074 to 61081. CICER ARRIETINUM L. Fabaceae. Chick-pea.

From the Central Provinces of Nagpur, India. Seeds presented by J. F. Dastur, Department of Agriculture. Received July 18, 1924.

Introduced for forage-crop specialists experimenting with small-seeded strains of chick-peas.

61074. Black gram 11-B.
61076. Dark brown gram (farm).
61077. Malida gram.
61078. Parbatiya gram.
61079. Parbatiya No. 2 (11-B).
61080. Yellow gram.
61081. Yellow No. 20 (11-B).

61082 and 61083. CICER ARRIETINUM L. Fabaceae. Chick-pea.

From Burma, India. Seeds presented by L. Lord, Deputy Director of Agriculture, Northern Circle, Mandalay. Received July 18, 1924.

Introduced for trial as stock feed in the southwestern United States.


From Honolulu, Hawaii. Budwood presented by Gerrit P. Wilder. Received July 24, 1924.

Wilder. The seed of the original tree of the Wilder was obtained by Gerrit P. Wilder from J. W. McFarlane, who lived on the Wiedemann place, now known as the Macdonald Hotel. Mr. Wilder planted the small seedling tree in his private garden at 41 1/2, Walaik Street, Makiki, Honolulu, in 1900. Although the tree grew vigorously for eight years and bore fruit abundantly, it gradually began to show signs of unsatisfactory soil conditions, and new trees were propagated from it by inarching on seedling rootstocks. The variety was maintained through inarching the progeny, from which there has been developed a large number of individuals. When grown in a proper environment the Wilder is a vigorous tree of rather upright growth and produces an abundance of fruit of excellent quality. The variety is easily propagated by budding. The fruit ripens during October, November, December, and January.

Fruit: Form, almost spherical or slightly elongated; color, olive green; rind, surface slightly undulated, so thick as to be shell-like; weight, 1 1/2 pounds; flesh, yellow, tinged to green next to the rind, nutty in flavor, and free from fiber; seed, larger than the ideal, tight in the cavity, covered with skin, but a perfect freestone. Keeping qualities of the fruit are very good. (The Guatemalan Avocado in Hawaii, Hawaii Bull. 51, p. 20.)

61085 and 61086.

From Nigeria, Africa. Seeds presented by the senior conservator of forests, Oloke-mjal, Southern Provinces. Received July 14, 1925.

61085. CARPODINUS HIRSUTA Hu. Apocy-nee.

A common vine in the dry zone of West Africa; according to Holland (Use-ful Plants of Nigeria) it yields a rubber of inferior quality, known as "flake rubber," or "paste rubber," and the latex is commonly used to adulterate that of Funatumia elastica. It is one of the so-called rubberizers. Introduced for department rubber specialists.


A large forest tree which is very widely distributed throughout central Africa and is the source of Lagos rubber, which is of excellent quality. It is being introduced with a view to including it in the collection of rubber plants now being brought together in southern Florida for investiga-tional purposes.

For previous introduction see S. P. I. No. 58943.

61087. SACCHARUM OFFICINARUM L. Poaceae. Sugar cane.

From Honolulu, Hawaii. Cuttings presented by Atherton Lee, experiment station of the Hawaiian Sugar-Planters' Association. Received July 10, 1924.

Cuttings of Striped Tip sugar cane, introduced for pathologists investigating sugar-cane diseases.

61088 to 61099.


1088 to 61099—Continued.

No. 106. Moshi. April 2, 1924. An important element in the natives' diet; grown alone on poles or allowed to cover banana plants.

No. 196. M'Kambara, Tanganyika Territory. April 3, 1924. A small grass grown as a semiruderal along the track.

No. 192. Karogive, Tanganyika Territory, April 3, 1924. A wild sorghum.


Moshi. April 2, 1924.
61094. No. 192. Type grown at Moshi, slopes of Mount Kilimanjaro.
61095. No. 193. Recently introduced at Moshi.
61096. No. 194. Red beans; introduced at Moshi.
61097. No. 195. White beans; introduced at Moshi.

No. 189. Moshi. April 2, 1924. Grown on slopes of Mount Kilimanjaro, at Moshi; altitude about 5,000 feet.

No. 188. Moshi. April 2, 1924. Grown at Moshi, but not extensively. Does fairly well.


61101 to 61198. Triticum spp. Poaceae. From Leningrad, Russia. Seeds presented by Prof. N. I. Vavilov, Director of the Bureau of Applied Botany and Plant Breeding. Received June 19, 1924. Notes by Professor Vavilov.


6111 to 61121. Var. coerulescens.
61112. No. 1351. Semipalatinsk, Siberia.
61113. No. 6841. Province of Saratov.
61115. No. 6845. Province of Samara. From the experimental station of Krasy-Kut.
61116. No. 6853. Province of Saratov.
61117. No. 6858. Province of Saratov. From the experimental station of Krasy-Kut.
61118. No. 6861. Province of Samara. From the experimental station of Krasy-Kut.
61119. No. 6862. Province of Saratov. From the experimental station of Krasy-Kut.
61120. No. 6863. Province of Samara. From the experimental station of Krasy-Kut.
61121. No. 6892. Province of Orenburg.

61122 to 61133. Var. hordeiforme.
61122. No. 5. Province of Voronezh. Kubanka.
61123. No. 145. Semipalatinsk, Siberia.
61124. No. 254. Province of Tomsk, Siberia.
61125. No. 255. Province of Tomsk, Siberia.
61126. No. 6598. Province of Samara. From the experimental station of Krasy-Kut.
61128. No. 6602. Province of Yeniseisk, Siberia.
61129. No. 6603. Province of Samara. From the experimental station of Krasy-Kut.
61130. No. 6604. Province of Saratov.
61131. No. 6606. Province of Samara. From the experimental station of Krasy-Kut.
61132. No. 6613. Province of Samara. From the experimental station of Krasy-Kut.
61101 to 61198—Continued.


61134. No. 6617. Province of Samara. From the experiment station of Krasny-Kut.


61136. No. 6620. Province of Voronezh.

61137. No. 6623. Turganisk Province, Central Asia.

61138. No. 6625. Province of Poltava.

61139. No. 6627. Province of Samara.

61140. No. 6630. Province of Samara. From the experiment station of Krasny-Kut.


61142. No. 6634. Province of Samara. From the experiment station of Krasny-Kut.

61143. No. 6636. Province of Samara.

61144. No. 6640. Province of Samara. From the experiment station of Krasny-Kut.


61146. No. 6644. Province of Samara.

61147. No. 6646. Province of Samara.

61148. No. 6648. Province of Saratov.


61150. No. 6651. Province of Syr-Darja, Turkestan.

61151. No. 6653. Province of Samara. From the experiment station of Krasny-Kut.

61152. No. 6654. Province of Samara.

61153. No. 6655. Province of Saratov.


61155. No. 6672. Province of Saratov.

61156. No. 6673. Province of Samara.


61158. No. 6676. Province of Samara. From the experiment station of Krasny-Kut.

61159. No. 6677. Province of Samara. From the experiment station of Krasny-Kut.


61166. No. 6697. Transcaspian Territory.

61167. No. 6698. Turkestan.

61168. No. 6708. Province of Podolia.

61169. No. 6711. Province of Samara.

61170. No. 6719. Province of Tomsk, Siberia.

61171. No. 6727. Province of Saratov.

61172. No. 6730. Province of Samara, Nicolaev.

61173. No. 6733. Province of Samara, Busuluk.

61174. No. 6761. Province of Samara.

61175. No. 6768. Province of Samara. From the experiment station of Krasny-Kut.

61176. No. 6779. Province of Samara. From the experiment station of Krasny-Kut.

61177. No. 6964. Transcaspian Territory.

61178. No. 6988. Province of Saratov.

61179. No. 6990. Province of Voronezh.

61180. No. 6992. Province of Samara. From the experiment station of Krasny-Kut.

61181. No. 6995. Province of Samara. From the experiment station of Krasny-Kut.

61182. No. 6999. Province of Saratov.

61183. No. 7058. Province of Samara. From the experiment station of Krasny-Kut.

61184 to 61195. Var. melanopus.

61184. No. 490. Province of Don.


61186. No. 836. Province of Don.


61188. No. 6772. Province of Tomsk, Siberia.

61189. No. 6777. Province of Eniseisk, Siberia.

61190. No. 6754. Province of Samara. From the experiment station of Krasny-Kut.

61191. No. 6759. Province of Samara. From the experiment station of Krasny-Kut.

61192. No. 6797. Province of Samara. From the experiment station of Krasny-Kut.

61193. No. 6821. Turkestan.

61194. No. 6831. Province of Samara, District of Novousensk.

61195. No. 7013. Province of Samara, District of Novousensk.
61101 to 61198—Continued.

61196. No. 6897. Province of Samara. From the experiment station of Krasny-Kut.

61197. No. 6901. Province of Samara. From the experiment station of Krasny-Kut.

61198. No. 6905. Province of Ferghana, Turkestan.

61199. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

April 19, 1924. Procured from the highest point reached by the Trans-Andean Railroad, at an altitude of about 10,000 feet. (Westover.)

61200. CITRUS MEDICA L. Rutaceae. Citron.

From the island of Corsica. Cuttings received August 1, 1924.

For testing by horticulturists engaged in citrus-breeding experiments.

61201 to 61223—Continued.

From the Union of South Africa. Collected by H. L. Shantz, Bureau of Plant Industry. Received July and August, 1924. Notes by Doctor Shantz.

61201. MANTA MURDINAECEA L. Araceae. Bermuda arrowroot.

No. 292. Livingstonia, Nyasaland. April 30, 1924. Arrowroot grown by the natives on the highlands above Nyasa.

61202. DISA sp. Orchidaceae.

No. 289. Livingstonia, Nyasaland. April 20, 1924. A beautiful blue terrestrial orchid, growing abundantly in mountain grassland west of Nyasa and said to be one of the most beautiful flowers here.

61203. ORNITHOGALUM sp. Liliaceae.

No. 435. Deedorns, Cape Province. June 16, 1924. Lilypike bulbs from the desert at the edge of the karoo.

61204. (Undetermined.)

No. 416. Deedorns, Cape Province. June 16, 1924. A handsome lilylike plant with yellow-tipped, red flowers. Not only is the flower of this plant attractive but the foliage is also somewhat variegated.

61205. COTYLEDON sp. Crassulaceae.

No. 444. Deedorns, Cape Province. June 16, 1924. This forms a showy, tree-like plant, reaching a height of 6 feet or more. It is leafless during the dry period, but the whole plant stem usually remains soft and green. At the beginning of growth it develops a thickened stem which reminds one of true bulbous plants.

61206. (Undetermined.)

No. 445. Deedorns, Cape Province. June 16, 1924. Bulbs of a liliaceous plant about 6 inches in diameter, which usually is very abundant throughout this section. The plant has a curious habit of forming a new bulblet at the base of each of the leaves when the old bulb dies. It is produced in great abundance at the edge of the karoo.

61207. (Undetermined.)

Same as No. 445 [S. P. I. No. 61206], but has small bulblets.

61208. (Undetermined.)


61209. BABIANA sp. Iridaceae.

No. 447. Deedorns, Cape Province. June 16, 1924. A very attractive iridaceous plant growing over a large portion of South Africa.

61210. (Undetermined.)


61211. (Undetermined.)


61212. (Undetermined.)


61213. BUPHANE DISTICHA (L. f.) Herbert. Amaryllidaceae.

No. 479. Cape Town, Cape Province. June 22, 1924. A plant, typically South African, with a very large bulb and stems a foot in diameter. It contains a very powerful toxic alkaloid called hematinine, and was one of the sources of arrow poison used by the bushmen. The bulb sends up a large head of small flowers.

61214. COTYLEDON sp. Crassulaceae.

No. 444a. Deedorns, Cape Province. June 16, 1924. This is a showy, tree-like plant, reaching a height of 6 feet or more. It is leafless during the dry period, but the whole plant stem usually remains soft and green. At the beginning of growth it develops a thickened stem which reminds one of true bulbous plants.

61215. GLADIOLUS sp. Iridaceae.

No. 287. Livingstonia, Nyasaland. April 29, 1924. A fine, large type, probably yellow flowered.

61216. GLADIOLUS sp. Iridaceae.

No. 288. April 29, 1924. From the escarpment above Nyasa near Livingstonia. A beautiful, small, pink, frail gladiolus; flowers few but large.

61217. BULBINE sp. Liliaceae.

No. 286. Livingstonia, Nyasaland. April 29, 1924. A fine, tall, wild type, with deep-blue to purple flowers; abundant throughout the grassland.

61218. (Undetermined.)

No. 290. Livingstonia, Nyasaland. Said to have very attractive flowers. These lilies grow in a heavy clay (lateritic) soil in a region where drought occurs but is not very severe.

61219. (Undetermined.)

No. 455. Deedorns, Cape Province. June 16, 1924. From the karoo.
61201 to 61223—Continued.

61220. (Undetermined.)
No. 450. Deedorns, Cape Province.
June 16, 1924. A curious tuberous plant.

61221. (Undetermined.)
No. 454. Deedorns, Cape Province.
June 16, 1924. A fleshy leaved bulbous plant from the desert and the edge of the karoo.

61222. (Undetermined.)
No. 451. Deedorns, Cape Province.
June 16, 1924. A plant with a small green spike.

61223. Cotyledon sp. Cressulaceae.
No. 444b. Deedorns, Cape Province.
June 16, 1924. This is a fleshy, treelike plant, reaching a height of 6 feet or more. It is leafless during the dry period, but the whole plant stem usually remains soft and green. At the beginning of the wet season it develops a thickened stem which reminds one of the true bulbous plants.

From Koslov, Tambov Government, Russia.
A form developed at the Plant Introduction Garden, Chico, Calif., from one of the original 14 cuttings received in 1911 from I. V. Mijurin, Koslov, through Frank N. Meyer, agricultural explorer. Numbered July, 1924.
Fruit 1 1/2 to 1 3/4 inches in diameter; pale yellow mottled with brownish, irregular blotches; cavity small, shallow; suture more or less prominent; skin thick; flesh yellow, melting, very juicy and deliciously sweet; pit small, practically free.

From Dacca, eastern Bengal, India. Seeds presented by R. S. Finlow, fiber expert to the Government of Bengal. Received July 30, 1924.
Native varieties of jute introduced for fiber-plant specialists. The quoted notes are from the Bengal Agricultural Journal, vol. 2, no. 1, 1922.

61225. Corchorus olitorius L.
"Chinsura Green, a selected type of Bogey jute which was raised by the fiber expert to the Government of Bengal and has given exceptionally heavy yields in western Bengal." (P. 7.)
For previous introduction see S. P. I. No. 55973.

61226 to 61229. Corchorus capsularis L.
For previous introduction see S. P. I. No. 4569.

61226. Kaliir Char. Locally grown seeds, Khulua, Bengal.
61227. Kaya Bombay (mixed with Kaliir Char).
61228. "B. 85. An eastern Bengal jute with the reputation of being a heavy yielder. It was selected by the fiber expert from the Kaliir Bombay strain and is resistant to the disease known as 'chorosis,' which causes yellowing of the leaves." (P. 7.)
61229. D. 151.

From Nougem sur Marne, Seine, France. Plant presented by the director, Colonial Garden. Received August 8, 1924.
Arabian jasmine is cultivated in India for the perfume oil, used in perfumery, which is obtained from the fragrant flowers. It is now introduced for the use of specialists investigating oil plants which yield perfume.

61231 to 61234.
From South America. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

April 5, 1924. Collected near Sucre, Buenos Aires, Argentina. Locally known as Australian brome or cebedilla. Highly prized as winter pasture grass.

Collected near Hospital, O'Higgins Province, Chile. This plant makes a very vigorous growth during the summer months and might be of some value in sections of this country where a summer green-manuring crop is desired.

June 1, 1924. Collected from a large plant growing along the ditch bank several miles above Alto del Carmen, Chile.

May 2, 1924. Hacienda Eitambo, Mallo, Chile.

From Manila, Philippine Islands. Seeds presented by Dr. C. J. J. Van Hall, Department of Agriculture, at the request of Dr. J. Van Hall, Bureau of Agriculture. Received September 17, 1924.
The m-yuen, or adlay, has attracted considerable attention as a cereal for tropical regions. According to Mr. Wester, it is better than upland rice for tropical agriculture in being more drought resistant, a heavier yielder, and much less expensive to cultivate. The seeds can be used largely in the same manner as corn.

61235. Bowtie. 61236. Davao. 61237. La Union Red.

61238 to 61242.
From Buitenzorg, Java. Plants presented by Dr. C. J. J. Van Hall, Department of Agriculture, Buitenzorg, through Carl Hartley, Bureau of Plant Industry. Received July 18, 1924.

61238. Castanopsis argentea (Blume) A. DC. Fagaceae.
No. 2. Used to grow green East Indian chestnut 50 to 60 feet high, with thin, narrow leaves about 7 inches long and dense clusters of spiny burs; each bur is about 2 inches wide and usually contains a single nut an inch in diameter. According to Doctor Hartley, these nuts are edible.
For previous introduction see S. P. I. No. 57732.
61238 to 61242—Continued.

61239 to 61242. **Quercus** spp. Fagaceae. Oak.

These four East Indian oaks are introduced for trial in the warmer parts of the southern United States as shade trees and as possible sources of tannin. The descriptive notes are taken from Miquel's *Flora van Nederlandsch Indie, vol. 1* and from Ridley's *Flora of the Malay Peninsula, vol. 3.*

61239. **Quercus blumeana** Koch.

No. 3. A rather uncommon tree, 40 to 50 feet high, with narrowly oblong, leathery leaves about 8 inches long and roundish silky tomentose acorns three-fourths of an inch wide.

61240. **Quercus induta** Blume.

No. 9. A tree with long-pointed, entire leaves and flattened acorns.

61241. **Quercus sundaca** Blume.

No. 6. A tall tree, 60 to 80 feet high, with silvery, thinly coriaceous elliptic leaves, and fruits in rather crowded stout spikes. The dark chestnut-colored ovoid-conic acorns are an inch in greatest diameter.

61242. **Quercus thyrsmanthi** Blume.

No. 4. A tree with serrate, narrowly oblong, leathery leaves about 6 inches long and ovoid-globose acorns an inch and a half in diameter.

61243 and 61244. **Fragaria** spp. Rosaceae. Strawberry.

From The Hague, Netherlands. Plants presented by the American vice consul, The Hague. Received September 12, 1924.

Dutch strawberry varieties introduced for testing by horticulturists.

61243. **Fragaria** sp.

Breadasche.

61244. **Fragaria** sp.

"Deutsch Evera. A prolific variety with very large, delicious berries." *(J. Abbing & Sons, Zeist, Netherlands, 1922-1923 catalog.)*

61245 to 61252.

From Cape Town, Union of South Africa. Bulbs purchased from W. S. Duke & Co., Cape Town, through H. L. Shantz, Bureau of Plant Industry. Received September 18, 1924.

61245. **Brassavigia josephiinae** (R ed.) Ker. Amaryllidaceae.

No. 467. A South African bulbous plant 2 to 3 feet high with eight or ten thick, closely ribbed, strap-shaped leaves and large, brick-red flowers.

61246. **Buphanch ciliaris** (L.) Herbert. Amaryllidaceae.

No. 470. The flower stalks of this remarkable South African amaryllidaceous plant appear before the leaves and bear 50 to 100 dull-purple flowers. The thick, strap-shaped leaves appear later.

61247. **Gladiolus** sp. Iridaceae.

A South African variety.


An attractive bulbous plant, native to South Africa, with three to five oblong, pointed leaves borne on a separate stem which appears with the flowers. The bright-red flowers are produced at the summit of an upright peduncle which grows from the base of the leaf stem.

61249. **Ornithogalum natalense** Baker. Iridaceae.

A white-flowered bulbous plant from the Cape of Good Hope, where several members of this genus are known as "chincherinches." The dried flower clusters are prized there as "everlastings."

61250. **Tritonia** sp. *(Montbretia* sp.). Iridaceae.

The Tritonias are South African plants, related to the irisces, with narrow leaves and numerous flowers of various colors. In the trade, Tritonias are often known as Montbretias.


A robust pink-flowered species, 4 to 6 feet high, with strap-shaped narrow leaves. The flowers are in dense or lax spikes, the terminal spikes measuring 6 inches to a foot in length. Native to South America.


The Watsonias are South African ornamental plants closely related to the gladiolus.


From Manila, Philippine Islands. Nuts presented by H. T. Edwards, Bureau of Plant Industry. Received July 29, 1924.

Pill nuts as grown in the Philippines are quite variable in quality, and these now sent in by Mr. Edwards are from particularly choice strains. The tree which is rarely cultivated, is tall, at times reaching 130 feet in height, with dark-green, pinnate leaves over a foot long. According to P. J. Wester (Food Plants of the Philippines), the triangular, pointed nut, inclosed in a black, shining shell, is excellent when eaten raw or roasted and is of high food value.

For previous introduction see S. P. I. No. 54474.

61254 to 61257.

From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.


April, 1924. Collected near Sucre, Buenos Aires.

61255 to 61257. **Paspalum dillatatum** Polr. Poaceae. Dallis grass.

SEEDS AND PLANTS IMPORTED

61254 to 61257—Continued.

61256. April 5, 1924. Collected near San José, Pueyrredon, Argentina. This is one of the most abundant grasses in this locality.


61258 to 61267. SOJA MAX (L.) Piper

SOYbean.

From Mariguame, Sanuki Province, Japan. Seeds presented by J. Woodrow Hassell. Received August 6, 1924.

Introduced for testing by agronomists engaged in soy-bean experiments.

61258. No. 1. 61260. No. 3.
61259. No. 2. 61261. No. 4.
61260. No. 3. 61262. No. 5.
61261. No. 4. 61263. No. 6.
61262. No. 5. 61264. No. 7.
61263. No. 6. 61265. No. 8.
61264. No. 7. 61266. No. 9.
61265. No. 8. 61267. No. 10.

61268. CLITANDBA ELASTICA Chevall.

Apocynaceae.

From Nigeria, Africa. Seeds presented by the senior conservator of the forests, Olokomejri, Southern Provinces. Received July 29, 1924.

A black rubber of good quality is obtained from this plant by the natives of Nigeria. It is one of the most abundant grasses in this locality. It is described by Chevallier as a climbing plant up to 60 feet in height, with elliptic, dark-green leaves, paler below, and spherical fruits the size of a mandarin orange. It is one of the principal sources of vine rubber on the Ivory Coast. When cut to the ground the vine shoots up again from the base. It is introduced for department rubber specialists.

61269 and 61270.

From Summit, Canal Zone. Seeds presented by Holger Johansen, Agronomist, Plant Introduction Garden. Received August 11, 1924.

61269. ARTOCARPUS COMMUNIS Forst.

Moraceae. Breadfruit.

The jackfruit (Artocarpus integra) has been grown successfully in southern Florida. The closely allied breadfruit, however, has not yet received an adequate trial in that State, and the department is now attempting to establish this tree in that region. Although it is not anticipated that the breadfruit tree will ever become of economic importance in the continental United States, it is thought that it may prove an interesting addition to the list of tropical economic plants which can be grown in the gardens of southern Florida.

For previous introduction see S. P. I. No. 57771.

61270. RHEDDIA sp. Clusiaceae.

Seeds of a native RHEDDIA. (Johansen.)

Some of the members of this genus of tropical trees have edible fruits. The mangosteen (Garcinia mangostana) belongs to this family.

61271. HIBISCUS sp. Malvaceae.

From Koro Levu, via Nadvoga, Fiji. Seeds presented by E. M. Bucknell. Received August 1, 1924.

A very handsome hibiscus with single flowers; these are deep, rich red. The plant is straggly in habit, being almost a vine. Propagation is easily effected by seeds. (Bucknell.)

61272. AVENA ABYSSINICA Hochst. Poaceae.

Oats.

From Asmara, Eritrea, Africa. Seeds presented by the Direttore dell' Ufficio Agricoltura Sperimentale. Received August 1, 1924.

In the upper part of the middle, or sub-tropical zone, of Abyssinia, where the altitude is approximately 8,000 feet, and also at still higher altitudes in some places, this species of oats is cultivated both as a cereal and for forage, according to Chiovenda (Osservazioni Botaniche nell' Etiopia). Besides the typical form, a number of local strains have been reported.

61273. CORYLOPSIS GOTOA'NA Makino.

Hamamelidaceae.

From Jamaica Plain, Mass. Cuttings presented by Prof. C. S. Sargent, Arnold Arboretum. Received August 12, 1924.

This is the hardest member of the genus Corylopsis, according to E. H. Wilson, of the Arnold Arboretum, where the plant has never suffered winter injury. It is a wide-spreading, twiggy shrub with delicately fragrant, lemon-yellow flowers in slender, pendent racemes and is one of the first shrubs to bloom in the spring. The individual flowers, three eighths of an inch across, are rich in nectar. This species is native to the rugged mountains of central Japan.

61274 to 61278.

From Edinburgh, Scotland. Seeds presented by William Wright Smith, Regius Keeper, Royal Botanic Garden. Received June 16, 1924. Notes by Mr. Smith.

Local Tibetan strains of crop plants secured for testing by agronomists.

61274. HORDEUM VULGARE COLESTE L. Poaceae.

Six-rowed barley.

No. 1. From Tuna, at an altitude of about 14,500 feet.
No. 2. From Dochen, at an altitude of about 13,000 feet.
No. 3. From Khangma, at an altitude of about 13,500 feet.
No. 4. From Khangma, at an altitude of about 13,500 feet.
No. 5. From Gyante, at an altitude of about 13,000 feet.
No. 6. From Gyante, at an altitude of about 13,500 feet.

61275. HORDEUM VULGARE COLESTE L. Poaceae.

Six-rowed barley.


No. 1. From Tuna, at an altitude of about 14,500 feet.
No. 2. From Dochen, at an altitude of about 14,000 feet.
No. 3. From Khangma, at an altitude of about 13,500 feet.
No. 4. From Khangma, at an altitude of about 13,500 feet.
No. 5. From Gyante, at an altitude of about 13,000 feet.
No. 6. From Gyante, at an altitude of about 13,500 feet.

61277 and 61278. PISUM SATIVUM L. Fabaceae.

Pea.

61279 to 61298. ORYZA SATIVA L. Poaceae.

Rice.

From Canton, China. Seeds presented by Edward Shim, Department of Agriculture, Canton Christian College. Received July 15, 1924.
61297 to 61298—Continued.

61286. **Fah Loh Check**.
61287. **Ho Kau Guk**.
61288. **Siu Goo Sun**.
61289. **Szechuan Chim**.
61290. **Tai Yip Chim**.
61291. **Tung Koon Bak**.
61292. **Yung Ying Chim**.
61293. **Yung Ying Chun Chim**.
61294. **Yuen Zui Hung**.
61295. **Zau Kau Lau**.
61296. **Shiro AM Dalilzu** (white autumn soybean). From the Saga Prefectural Agricultural Experiment Station. Received August 18, 1924. "Calcatta. Straw weaker than Algerian [S. P. I. No. 61304], and mildly inclined to lodge. This variety is reported to be early in most districts, but it is sometimes considered as midseason. The panicle is equilateral, spreading, and erect. (P. 26.)"

61300. **SOJA MAX** (L.) Piper From Fukuoka, Japan. Seeds presented by Dr. Tyozaburo Tanaka, in charge, Horticultural Institute, Department of Agriculture, Kyushu Imperial University. Received July 24, 1924. Notes by Doctor Tanaka.

61299 and 61300. **SOJA MAX** (L.) Piper (Glycine hispida Maxim.). Fabaceae. Soy bean. From Fukuoka, Japan. Seeds presented by Dr. Tyozaburo Tanaka, in charge, Horticultural Institute, Department of Agriculture, Kyushu Imperial University. Received July 24, 1924. Notes by Doctor Tanaka.

61300. **Kuro AKI Daidzu** (black autumn bean). From the Saga Prefectural Agricultural Experiment Station.

61301. **GARCINIA MANGOSTANA L. CLUshaceae. Mangosteen.** From Paris, France. Seeds purchased from Vilmorin - Andrieux & Co. Received May 7, 1924. This is said to be the wild mango, but probably it is the cultivated form which has escaped. (Westover.)

61304 to 61309. **AVENA spp. Poaceae.** From Melbourne, Victoria, Australia. Seeds presented by A. E. V. Richardson, Superintendent of Agriculture. Received August 6, 1924. Quoted notes from the Australian Institute of Science and Industry, Bulletin No. 23.

61304 and 61305. **AVENA STERILIS L. Oats.**

61304. "Algerian. A very good general-purpose oat, giving excellent yields in all districts except those where a very early variety is necessary. Occasionally reported as having a tendency to shatter and lodge, but on the whole does neither. Season medium; stooling medium to abundant. The panicle is equilateral, spreading, erect, and rather short." (P. 27.)

61305. "Calcatta. Straw weaker than Algerian [S. P. I. No. 61304], and mildly inclined to lodge. This variety is reported to be early in most districts, but it is sometimes considered as midseason. The panicle is equilateral, spreading, and erect. (P. 26.)"

61306 to 61308. **AVENA SATIVA L. Oats.**

61306. "Dun. A general-purpose variety for the colder districts. Season late; stooling abundant; the panicle equilateral and erect." (P. 21.)

61307. "Quandong. Medium stooler as compared with Ruakura [S. P. I. No. 61308], but has slightly taller, stronger straw. Good variety for dry districts. Season early; panicle equilateral, spreading, erect, and rigid." (P. 22.)

61308. "Ruakura. Good general-purpose oat. Season early; stooling abundant; panicle equilateral, spreading, erect, rigid, lateral branches rigid." (P. 25.)

61309. **AVENA SATIVA L. STERILIS.** Hybrid oats.

61309. "Yarvan. Season early; stooling medium, panicle equilateral, erect, long, branches erect, number of lateral branches seven to twelve." (P. 24.)

61310 and 61311. **ZEA MAYS L. Poaceae. Corn.**

61310. **Laurel.** From Peru, South America. Seeds collected by Fred D. Ritcher, of the Bureau of Plant Industry, and Prof. R. A. Emerson, of Cornell University. Received July 31, 1924. Introduced for agronomists experimenting with corn varieties.

61311. **Granada.**
**SEEDS AND PLANTS IMPORTED**

61312. **CITRUS AURANTIFOLIA** (Christm.) Swingle. Rutaceae. **Lime.**
From Panama. Seeds collected by David Fairchild, Bureau of Plant Industry. Received August 28, 1924.

August 2, 1924. A wild lime growing in dense shade on the new Lathrop Trail just opened up across Barro Colorado Island. The fruits were of medium size, with few seeds, and of excellent quality. (Fairchild.)

61313. **MARTINEZIA EROSA** Linden. Phoe- nicaceae.
From Santiago de las Vegas, Cuba. Seeds presented by Gonzalo Fortun, Director, Estación Experimental Agronómica, through David Fairchild, Bureau of Plant Industry. Received July 25, 1924.

A small ornamental feather-leaved palm from tropical America which is covered throughout with long, needlelike spines. A related species (M. Caryotaefolia) is grown to some extent in lower Florida.

For previous introduction see S. P. I. No. 51724.

From Czechoslovakia. Seeds presented by Schunker & Co., Bron. Received August 12, 1924.

To be grown for comparison and cultural tests.

From Maymyo, India. Seeds presented by Charles T. Bogg, Superintendent, Government Botanic Garden. Received July 14, 1924.

A vigorous climber from eastern India, which, according to Watt (Dictionary of the Economic Products of India), has received some consideration in that country as a source of rubber. In Burma the plant is cultivated to some extent for the edible fruit, which is about the size of a pea, are used as a condiment.

61317 to 61321—Continued.

A perennial, fibrous-rooted grass, with erect stems and narrowly linear leaves. Native to Afghanistan.

A perennial, European grass, of upright habit, about a foot in height.

From Simla, India. Seeds presented by L. A. Evans, Secretary of Agriculture, at the request of P. J. Wester, Manila. Received July 18, 1924.

A tall, unarmed palm, with a slender, straight stem and long pinnate leaves, growing in protected situations and where the rainfall is evenly distributed. It is one of the most attractive and graceful palms that I have seen, and from my experience with it at Lamao it will make a good plant for the conservatory and possibly a good house palm. (Wester.)

For previous introduction see S. P. I. No. 40640.

61317. **MELILOTUS SVAEOLENS** Lede. Fabaceae. Sweet clover.
A Siberian sweet clover introduced for cultural and comparison tests.

A local strain of annual yellow melilot, collected near the Solan brewery; introduced for testing by agronomists.

61322. **MELILOTUS INDICA** (L.) All. Fabaceae. Sweet clover.
From Simla, India. Seeds presented by H. E. J. Peake, Khatlone Fruit Orchards, Solan brewery. Received July 17, 1924.

A local strain of annual yellow melilot, collected near the Solan brewery; introduced for testing by agronomists.

From Simla, India. Seeds presented by L. A. Evans, Secretary of Agriculture, at the request of P. J. Wester, Manila. Received July 18, 1924.

A tall, unarmed palm, with a slender, straight stem and long pinnate leaves, growing in protected situations and where the rainfall is evenly distributed. It is one of the most attractive and graceful palms that I have seen, and from my experience with it at Lamao it will make a good plant for the conservatory and possibly a good house palm. (Wester.)

For previous introduction see S. P. I. No. 40640.

61318. **ANOPTERUS GLANDULOSUS** Labill. Escalloniaceae.
A handsome evergreen shrub, abundant in Tasmanian forests, with leathery, toothed leaves and rather large flowers, white with a rosy tint, produced in erect, terminal racemes.

61325. **BILLARDIERA LONGIFLORA** Labill. Pittosporaceae.
A twining shrub, sometimes several feet in length, with leaves varying from oval to linear in shape and from half an inch to 2 inches in length. The flowers are pendulous on solitary stems an inch long. This plant grows wild along watercourses in Australia and Tasmania.

For previous introduction see S. P. I. No. 56562.

61325. **BILBAHIDA LONGIFLORA** Labill. Pittosporaceae.
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For previous introduction see S. P. I. No. 56562.


The bark of this Tasmanian shrub or small tree, like that of its Chilean rela- tive (D. aromatica), possesses aromatic properties, and the round drupes, about the size of a pea, are used as a condiment.
A stout Tasmanian shrub or small tree, described by Bentham (Flora Australiensis) as having long, narrow leaves crowded at the ends of the branches, and white or pink flowers, nearly half an inch long, in dense terminal clusters.

From Asmara, Eritrea, Africa. Seeds presented by the Direttore dell'Ufficio Agrario Sperimentale. Received August 1, 1924.

E. O. Fenzi, of Tripoli, Libia, states (under S. P. I. 61366) that this plant may prove of special interest, since it grows in the poorest and driest soil, attains a height of 30 to 40 feet, and yields a large quantity of latex containing about 5 per cent of first-class rubber.

From Balavaini, Marovo Lagoon, Solomon Islands. Tubers presented by H. Trevor Fairbrother. Received August 6, 1924.

The tubers of this plant are small, about the size, shape, and flavor of Morton's tinned new potatoes. The plant bears in about two months from planting, and the "potatoes" are not borne underground, but on the vine, which bears from 300 to 2,000 tubers of varying size. This is an ideal substitute for the potato. (Fairbrother.)

A shrub or small tree, native to dry, stony places in Asia Minor and southeastern Europe. According to the late Frank N. Meyer (in his note under S. P. I. 26765), it is able to withstand much heat and drought. The flowers are in dense corymbs, and the fruits are dark red.

For previous introduction see S. P. I. No. 26765.


Local clover strains from two localities in England, introduced for testing by clover specialists.

61332 and 61333. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Sapporo, Japan. Seeds presented by J. Minami, College of Agriculture, Sapporo, through C. R. Ball, Bureau of Plant Industry. Received August 15, 1924.

Introduced for specialists engaged in experimenting with various types of cereals.


61334. Chevalier (spring).
61335. Golden melon (spring).
61336. Hanna (spring).
61337. Hokudai No. 1 (spring).
61338. Date No. II × Hokudai No. 1 (winter).


61339. Erhardt Frederiksen (spring).
61340. Imperial (spring).
61341. Date No. II (winter).
61342. Date No. II × Hokudai No. 1 (winter).


61343. Green Mountain (spring).
61344. Sapporo (spring).
61345. White fife (spring).
61346. Akakawa aka (red grain, winter).
61347. Red genealogical (winter).
61348. Sandmilka (winter).
61349. Shirakawa shiro (white grain, winter).
61350. White Champion (winter).


61351. Medea (spring).
61352. Roumania (spring).

61353 to 61355. Trifolium pratense L. Fabaceae. Red clover.

From Lemberg, Poland. Seeds received August 28, 1924. Introduced for testing by clover breeders.

61353. (No. 1.) 61355. (No. 3.)
61354. (No. 2.)


From Poona, Bombay, India. Seeds presented by Dr. William Burns, Economic Botanist, College of Agriculture. Received August 20, 1924. Notes by Doctor Burns.

Introduced for trial as stock feed in the southwestern United States.

61356. No. 1. White variety from Poona.
61357. No. 2. Yellow variety from Poona.
61358. No. 3. Small, yellow variety from Dohad.
61359. No. 4. Small, white variety from Dohad.
61360. No. 5. Small, red variety from Dohad.
61361. No. 6. Small variety from Ahmednagar.
61362. No. 7. Yellow variety from Belgaum.
61363. No. 8. From Belgaum.

61334 to 61352—Continued.

61334. Chevalier (spring).
61335. Golden melon (spring).
61336. Hanna (spring).
61337. Hokudai No. 1 (spring).
61338. Date No. II × Hokudai No. 1 (winter).
61339. Erhardt Frederiksen (spring).
61340. Imperial (spring).
61341. Date No. II (winter).
61342. Date No. II × Hokudai No. 1 (winter).

61343. Green Mountain (spring).
61344. Sapporo (spring).
61345. White fife (spring).
61346. Akakawa aka (red grain, winter).
61347. Red genealogical (winter).
61348. Sandmilka (winter).
61349. Shirakawa shiro (white grain, winter).
61350. White Champion (winter).


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61363. No. 8. From Belgaum.
61356 to 61365—Continued.


61366 and 61367.
From Tripoli, Libia, North Africa. Seeds presented by Dr. E. O. Fenzi. Received August 20, 1924.

61366. **Euphorbia abyssinica** Gmel. Euphorbiaceae.

This may prove of special interest, since it grows in the poorest and driest soil, attaining a height of 20 to 40 feet, and yields a large quantity of latex containing 5 per cent of first-class rubber. (Fenzi.)

For previous introduction see S. P. I. No. 61329.

61367. **Salvadora persica** L. Salvadoraceae.

A shrub or small tree which grows commonly in dense clumps on the shores of Lake Chad, Africa. The seeds contain about 45 per cent of fat, according to Holland (Useful Plants of Nigeria); this is suitable for making candles. The pungent shoots and leaves are eaten as salad and also given to stock as fodder.

For previous introduction see S. P. I. No. 53845.

61368 to 61372. **Pilaseolus calcaratus** Roxb. Fabaceae. Rice bean.

From Mandalay, Burma. Seeds presented by M. McGibbon, Economic Botanist, Mandalay, through C. V. Piper, Bureau of Plant Industry. Received August 20, 1924.

Five varieties of rice beans obtained for testing by forage-crop specialists.

61368. Be or **P. yin**.
61369. Be or **P. chinè**.
61370. Betè Be or **P. chinè** (large).
61371. Betè Be or **P. chinè** (small).
61372. Kachin-pè.


From Dehra Dun, United Provinces, India. Seeds presented by C. C. Campbell. Received August 13, 1924.

A hardy grass which thrives in sandy places and is said to yield hay of high quality.

61374 to 61377—Continued.

61374. **Colocasia** sp.

This is called “Chinese taro” here; I bought it in the market at Papeete.

61375. **Colocasia** sp.

Red variety, from the same locality as the black variety [S. P. I. No. 61374].

61377. **Colocasia** sp.

This is called “tarua” here; it is a very good dry-land plant and was grown on my plantation on Tahiti, at an altitude of 50 feet.

61378 to 61384. **Trifolium pratense** L. Fabaceae. Red clover.

From Czechoslovakia. Seeds presented by Dr. C. A. Purpus, Zacapa, Guatemala. Received August 25, 1924.

Local strains of red clover introduced from Czechoslovakia for breeding tests.

61378. No. 1-B. 61382. No. 5-B.
61379. No. 2-B. 61383. No. 6-B.
61380. No. 3-B. 61384. [No notes.]
61381. No. 4-B.

61385. **Acrocomia sclerocarpa** Mart. Phoeniceaceae. Macauba palm.

From Vera Cruz, Mexico. Seeds presented by Dr. C. A. Purpus, Zacapa. Received August 26, 1924.

A graceful, spiny, tropical American palm, 30 to 45 feet high, with a terminal cluster of narrow, pinnate leaves. When matured, the inside of the trunk furnishes excellent starch equal in quality to that of the cassava plant. The leaves yield strong fiber, utilized by the natives of Paraguay for making hammocks. From the yellowish fruits, about an inch in diameter, an excellent edible oil is expressed.

For previous introduction see S. P. I. No. 53487.

61386 and 61387.

From La Provenciencia, Chiapas, Mexico. Presented by Dr. C. A. Purpus. Received August 20, 1924.

61386. **Chamaedorea triflilota** Liebm. Phoeniceaceae. Palm.

Seeds of a relative of the pacayito (Chamaedorea elephas); this is a slightly larger palm, becoming about 10 feet high, with leaves 4 feet long. Doctor Purpus says that the undeveloped flowers make an excellent vegetable and are eaten throughout the State of Vera Cruz, Mexico. It grows best in shady places.

61387. **Xanthosoma violaceum** Schott. Araceae. Yautia.

Corms of a very handsome Mexican plant, related to the elephant-ear. The leaves are dark bluish green with very dark stems.

61388 to 61392.

From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

61388. **Aeluropus littoralis** (Gouan) Poaceae. Grass.

A hardy grass which thrives in sandy places and is said to yield hay of high quality.
61388 to 61392—Continued.


61390. AGROPYRON SIBIRICUM (Willd.) Beauv. A perennial, cespitose grass, native to Siberia, with erect or ascending stems about 15 inches high. For previous introduction see S. P. I. No. 57222.

61391. AGROPYRON TRITICEUM Gaertn. An annual Siberian grass, much branched at the base, with stems 8 inches or less in length.

61392. ALHAGI PSEUDALPIAGI (Bieb.) Desv. (A. camelorum Fisch.) Fabaceae. Camel's thorn. The camel's thorn is a very prickly, herbaceous, perennial plant, native to central Asia. It grows on very dry lands, often strongly alkaline, but is likely to become a serious weed if allowed to get beyond control. The pinkish brown flowers appear to be rich in nectar. Introduced for forage-crop specialists.

61393. ACACIA CAVENIA (Molina) Bert. Mimosaceae. Cavan. From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. A much-branched, spiny shrub about 20 feet high, native to Chile. The large, globular flower heads are deep yellow and very fragrant. A good hedge plant.

61394 to 61401—Continued.


61401. BROMUS JAPONICUS Thunb. Poaceae. Grass. A biennial, upright or ascending grass of wide distribution in Europe and Asia. It commonly becomes 1 to 2 feet high.

61402. MEDICAGO SATIVA L. Fabaceae. Alfalfa. From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. June 10, 1924. These seeds were procured through Williamson & Co., and are said to come from the Huasco Valley. (Westover.)

61403. CAPPARIS SPINOSA L. Capparidaceae. Caper. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924. A trailing shrub armed with stipular spines, with leathery roundish leaves and large, white flowers. The buds are pickled as "capers." Native to the Mediterranean region.

61404 to 61406. PROSOPIS spp. Mimosaceae. From South America. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

61404. PROSOPIS sp. Lampa, Chile. May 13, 1924. Trees very large, with trunk sometimes attaining a diameter of 1½ feet or more.

61405. PROSOPIS sp. Paso de los Andes, Mendoza, Argentina. March 31, 1924.

61406. PROSOPIS sp. Alto del Carmen, Chile. June 1, 1924.

61407. Cicer arietinum L. Fabaceae. Chick-pea. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924. Introduced for testing as forage.

61408 to 61410. PASPALUM DISTICHUM L. Poaceae. Grass. From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

61408. Cunaco. May 7, 1924.

61409. June 5, 1924. From the estate of Señor Izquierdo, Santa Ines.

61410. May 7, 1924. Collected near Nancahu. Forms the main pasture grass in this region and grows as a weed in the cultivated fields.
61411 and 61412.
From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

A spreading annual grass, native to the Mediterranean region.

61412. DELPHINIUM RUGULOSUM Boiss. Ranunculaceae. Larkspur.
An annual plant, described by Boissier (Flora Orientalis) as being 4 to 5 inches high, often with several stems, and with grayish blue flowers.

61413 and 61414. PASPALUM DISTICHUM L. Poaceae. Grass.
From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

61413. March 31, 1924. This grass, similar to carpet grass, is found around irrigating ditches and roadways and in vineyards near Mendoza. (Westover.)

61414. April 5, 1924. Collected at Sucre. This grass, highly relished for pasture, is common along the roads and in closely grazed pastures. (Westover.)

61415 to 61419.
From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

Introduced for testing by forage-plant specialists.

A tall, erect, perennial grass, native to Siberia.

A tall, erect, perennial grass, native to Siberia.

61418. EPHEDRA DISTACHYA L. Gnetaceae.
A low, decumbent shrub with pale or bluish green stems and scarlet, berrylike fruits. Native to southern Europe and western Asia.

An annual, much-branched grass, with jointed, ascending stems up to a foot and a half long. Widely distributed throughout the North Temperate Zone.

61420. PASPALUM DISTICHUM L. Poaceae. Grass.
From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

June 7, 1924. Seeds presented by Enrique Matte, Buin. (Westover.)

61421. EVERSANNIA SUSPINOSA (Fisch.) B. Fedtsch. Fabaceae.
From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924. A shrubby, slightly spiny plant, native to arid regions in southeastern Russia.

61422. PHALARIS BULBOSA Just. Poaceae.
From Buenos Aires, Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

April 8, 1924. Obtained from the Bridger brothers. (Westover.)

61423 to 61427.
From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

61423. FRITILLARIA KARELINI (Fisch.) Baker. Liliaceae.
A dwarf, compact species, which, according to Boissier (Flora Orientalis), has lilac flowers produced in 3 to 12 flowered racemes.

61424 to 61427. GLYCYRRHIZA spp. Fabaceae. Licorice.

61424. GLYCYRRHIZA ASPERA Pall.
A perennial plant with ascending stems and purplish flowers; found native in semiarid regions of southern Siberia.

61425. GLYCYRRHIZA GLabra L.
A perennial, somewhat woody plant, with thick, subterranean runners and stout, upright stems sometimes 3 feet high. Native to southern Europe and Turkestan.

61426. GLYCYRRHIZA TRIPHYLLA Fisch. and Mey.
An erect, perennial plant, 1 to 2 feet high, with pinkish white flowers. Native to Siberia.

61427. GLYCYRRHIZA URALENSIS Fisch.
An erect perennial plant with hairy stems; native to the Ural Mountains, Siberia. Introduced for testing as forage.

From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

Boros. May 24, 1924. (Westover.)


From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924. A low, perennial, spreading grass with dense, spikelike panicles. Native to the Mediterranean region.


From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

These wheats, procured from a seedsmen in Chile, are said to be the three varieties most commonly grown. (Westover.)

61430. Bianco wheat.

61431. Egypto wheat.

61432. Florence wheat.

A perennial plant, native to Turkestan, with small, narrowly ovate leaves and short spikes of white flowers.

61434 and 61435. From South America. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

61434. **Solanum muricatum** Ait. Solanaceae. Pepino. Ovalle, Chile. June 1, 1924. One sees large acreages of this plant in the small irrigated valleys of northern Chile. The fruits, highly prized among the natives, are very sweet and juicy and rather palatable. They are sold everywhere in the markets, and the natives even flock around all the trains in an effort to sell them.

61435. **Sorghastrum sp.** Poaceae. Grass. April 8, 1924. Collected southeast of Buenos Aires, where it is highly esteemed as a pasture grass.

61436 to 61438. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

61436. **Medicago sativa** L. Fabaceae. Alfalfa. Introduced for cultural and comparison tests.


61438. **Peganum harmala** L. Zygophyllaceae. An erect, strong-scented, shrubby plant, 2 to 3 feet high, with irregularly cut leaves and terminal, white flowers. Native to the Mediterranean region.

61439 and 61440. From Argentina. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

61439. **Sporobolus Schoenaeus** Phil. Poaceae. Grass. March 30, 1924. This grass is abundant in the pastures around Lupan de Cuyo, Mendoza, but is apparently not relished by cattle. (Westover.)

61440. **Stenotaphrum secundatum** (Walt.) Kuntze. Poaceae. April 8, 1924. Collected southeast of Buenos Aires, where it is highly esteemed as a pasture grass. (Westover.)

61441. **Polygorn maritimus** Wild. Poaceae. Grass. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

A low, annual grass, with laxly ascending stems not over a foot in length. Native to the Mediterranean region.

61442 and 61443. From South America. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

61442. **Stipa pataposa** Nees. Poaceae. Grass. April 5, 1924. Collected near Sucre, Argentina. This grass is apparently not relished by cattle so long as other grasses are available.


61444. **Sphaerocephala salsula** (Pall.) DC. Fabaceae. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

A perennial herbaceous plant, native to Turkestan, with erect stems and racemes of purplish flowers.

61445. **Zeá Mays** L. Poaceae. Corn. From Chile. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924.

Hacienda El Tambo, Mallao. May, 1924. (Westover.)

61446 and 61447. From Omsk, Russia. Seeds presented by Prof. K. Murashinsky, Siberian Agricultural Academy. Received June 24, 1924.

61446. **Trigonella arcta** Meyer. Fabaceae. An annual leguminous plant found native in dry situations in Asia Minor.

61447. **Tulipa rosszczowi** Regel. Liliaceae. Tulip. A Russian tulip with stems 12 to 18 inches high, bluish green, narrowly ovate leaves up to 6 inches in length, and red flowers with black blotches at the base of the petals.


61448. **Abu Carakish.**

61449. **Abu Khimmer.**

61450. **Abu Shanab No. 9.**

61451. **Ahamar No. 21.**

61452. **Beid-el-Chor.**

61453. **Dura Abiad No. 1.**

61454. **Dwarf Feterita No. 811.**

61455. **Dwarf Hegari.**

61456. **Dwarf Milo No. 1933.**

61457. **El Hachcrag.**

61458. **Feterita.**

61459. **Feterita No. 25.**

61460. **Gasabbi.**

61461. **Hegiri.**
61448 to 61477—Continued.

61463. Hemeeli.
61463. Higiri No. 6.
61464. Kalm Ahmer.
61465. Khamis Wad Gah.
61466. Korgi No. 1.
61467. Milo kassod (hybrid) No. 1478.
61468. Mogd Wad Fudl.
61469. Mugued.
61470. Neili Neili No. 7.
61471. Safra Bahr-el-Abiad.
61472. Safra el Dahara.
61473. Shal Shahih No. 4.
61474. Shalouf el Naga.
61475. Sheikori No. 2.
61476. Shul Shalih No. I.
61477. Waga.
61478. Waga.
61479 to 61505.

From Amani, Tanganyika Territory, Africa.

61478 to 61505—Continued.

61478. ALBIZIA ADIANTHIPOLIA (Cav.) E. Mey. A large, rapid-growing tree, native to the subtropical regions of eastern India. It is said by Watt (Dictionary of Economic Products of India) to have been found very satisfactory in Assam as a shade tree for tea. The crop matures later than C. robusta. The differences are in the seed and fruit, and culturally this species is very similar to C. arabica. (Note taken from Tea and Coffee Trade Journal, vol. 55, p. 477.)

61479. ALBIZIA AMMONILLA Roxb. Tiliaceae. No. 47. "Trincomali wood" is the name under which the very hard, durable, dark-red wood of this Indian tree is exported, according to Watt (Dictionary of the Economic Products of India). The wood is used for making agricultural implements and for other purposes where toughness and hardness are desired. The tree is large, with long-stemmed, heart-shaped leaves and dense mecomes of small, white flowers. Its distribution includes the Malay Archipelago and the Philippines. No. 75. Seeds of this tropical American rubber tree have been obtained for the use of department rubber specialists. For previous introduction see S. P. I. No. 42365.

61480. ALBIZIA CHINENSIS (Osbeck) Merr. (A. stipulata Boliv.) Casuarinaceae. No. 16. This tropical African species, like many others of the genus, is a large, handsome tree of spreading habit, which is suitable as a shade tree in tropical or perhaps subtropical regions.

61481. CASTILLA ELASTICA Tiliaceae. No. 12. A variety of pyramidal habit resembling the mimosas in general appearance; it is occasionally planted in eastern Java as a shade tree, according to C. A. Backer (Schoolflora voor Java). A small, white flowers. Its distribution includes the Malay Archipelago and the Philippines. No. 76. Unlike many of the better-known casuarinas, this species is only a small shrub 2 to 3 feet high. It is common in Tasmania and in parts of southern Australia.

61482. COFFEA BUKOBENSIS Zimmerm. Rubiaceae. No. 104. The coffee grown in the vicinity of Bukoba, Tanganyika Territory, was formerly supposed to be a variety of Coffea arabica, but Zimmermann (Der Pflanzer, vol. 4) maintains that it is a separate species and has named it C. bukobensis. The differences are in the venation of the leaves and flower structure, and culturally this species is very similar to C. arabica.


61478 to 61505—Continued.


No. 220. A shrubby tropical African tree, 20 to 30 feet high, which furnishes rubber said to be of about the same quality as that from Landolphia kirkii. Introduced for testing by rubber specialists.


No. 225. The calabash nutmeg is described in Curtis's Botanical Magazine (pl. 3059) as a large, spreading, tropical African tree, with shining, pale-green leaves, and fragrant flowers. The latter, borne singly in the leaf axils, are about 6 inches across, with six petals; three of these are spreading and yellow, the other three are erect and creamy white, and all are dotted with red. The fruit, 4 to 6 inches in diameter, contains a number of cylindrical seeds about an inch long; these have a flavor resembling closely that of the common nutmeg.

For previous introduction see S. P. I. No. 47500.


No. 227. Abaca seeds introduced for testing by fiber-plant specialists.

For previous introduction see S. P. I. No. 57096.


No. 34. Palms of this genus have smooth, ringed trunks, crowned at the summit by a dense cluster of pinnate leaves.


No. 275. A tall leguminous tree, sometimes 120 feet high in Brazil, its native country, with large, handsome, fernlike leaves and large panicles of yellow flowers. It is of possible value as a shade and ornamental tree for the warmest parts of Florida.

For previous introduction see S. P. I. No. 45621.

61503. Syzygium owahense (Beauv.) Benth. (Eugenia owariensis Beauv.). Myrtaceae.

No. 169. A tropical African tree, 30 to 40 feet high, closely related to the jambolan (Syzygium jambolana). The small fruits are eaten by the natives of Nigeria, according to Holland (Useful Plants of Nigeria), and the tree is good for timber.


No. 288. In the eastern sections of tropical Africa the roundish seeds produced by this clinging shrub are boiled and eaten by the natives. The perennial stems become 50 to 100 feet long; the flowers are pale purple, and the oblong fruits, 2 to 3 feet long, contain many seeds. The seeds also yield an abundance of oil which is said to be equal in quality to olive oil, according to an analysis made at the Imperial Institute, London.

For previous introduction see S. P. I. No. 55594.
61478 to 61505—Continued.

61505. Terminalia bellirica (Gaertn.) Roxb. Combretaceae.

No. 291. The small, round fruits of this handsome tropical Indian tree have been exported from India for tanning purposes under the name of myrobalans. The yellowish gray wood is used for general construction. The tree also has merit as a shade tree for avenues, with its huge buttressed trunk and long horizontal branches.

For previous introduction see S. P. I. No. 51666.

61506 to 61592. Hordeum spp. Poaceae.

From Leningrad, Russia. Seeds presented by Prof. N. T. Yavilov, Director, Bureau of Applied Botany and Plant Breeding. Received July 11, 1924. Notes by Professor Yavilov.

61506. Hordeum distichon nivale L. Two-rowed barley.

No. 3773.


Pure-line varieties.

61507. No. 0114. Province of Tiflis.
61508. No. 0149. Province of Kutais.
61509. No. 0110. Province of Erivan.
61510. No. 0124. Province of Erivan.

61511 to 61568. Hordeum vulgare cœleste L. Six-rowed barley.

From Mongolia.

61511. No. 3878. 61520. No. 3927.
61513. No. 3886. 61522. No. 3942.
61514. No. 3887. 61523. No. 3998.
61515. No. 4242. 61524. No. 4020.
61516. No. 3904. 61525. No. 4023.
61517. No. 3912. 61526. No. 4024.
61518. No. 3922. 61527. No. 4026.
61519. No. 3923. 61528. No. 4028.

61529 to 61559. Subvariety himalayense.

61529. No. 3939. 61545. No. 4055.
61530. No. 3938. 61546. No. 4057.
61531. No. 3945. 61547. No. 4038.
61532. No. 3985. 61548. No. 4039.
61534. No. 3997. 61550. No. 4041.
61535. No. 4001. 61551. No. 4042.
61536. No. 4007. 61552. No. 4043.
61537. No. 4008. 61553. No. 4060.
61538. No. 4017. 61554. No. 4061.
61539. No. 4019. 61555. No. 4062.
61540. No. 4029. 61556. No. 4068.
61541. No. 4030. 61557. No. 4071.
61542. No. 4031. 61558. No. 4074.
61543. No. 4032. 61559. No. 4075.
61544. No. 4034.

61560 to 61568. Subvariety violaceum.

61560. No. 4060. 61565. No. 3921.
61561. No. 3917. 61566. No. 3927.
61562. No. 3918. 61567. No. 4000.
61563. No. 3919. 61568. No. 4082.
61564. No. 3920.


No. 017. Province of Don. A pure-line variety.


61570. No. 099. Province of Erivan.
61571. No. 0210. Province of Tiflis.
61572. No. 0315. Province of Tiflis.
61573. No. 0363. Province of Volgodag.
61574. No. 0394. Province of Volgodag.
61575. No. 2789. Province of Archangel.
61576 to 61591. From Mongolia.
61576. No. 3926. 61584. No. 4064.
61577. No. 4044. 61585. No. 4065.
61578. No. 4147. 61586. No. 4069.
61579. No. 4052. 61587. No. 4070.
61580. No. 4053. 61588. No. 4073.
61581. No. 4055. 61589. No. 4077.
61582. No. 4059. 61590. No. 4079.
61583. No. 4063. 61591. No. 4088.

61592. Subvariety rikotense.

No. 0621. Province of Elizabetpol.

61593 and 61594. From Darjiling, India. Seeds presented by G. H. Cave, Curator, Lloyd Botanic Garden. Received September 4, 1924.

61593. Acacia catechu (L. f.) Willd. Mimosaceae.

The pale-yellow gum obtained from this acacia has very strong adhesive powers and is considered a better substitute for gum arabic than that from Acacia arabica, according to Watt (Dictionary of the Economic Products of India). The tree is found wild in parts of India and Burma, where it sometimes becomes 70 feet high, though usually smaller. The leaves are very finely pinnate, and the white or pale-yellow flowers are in spikes.

For previous introduction see S. P. I. No. 51420.

61594. Albizzia procera (Roxb.) Benth. Mimosaceae.

A tall, handsome, tropical tree, often 60 to 80 feet high, with yellowish or greenish white bark, large compound leaves, and terminal panicles of yellowish white flowers. In Burma, Bengal, and southern India, where the tree is native, the brown heartwood is used for making agricultural implements.

For previous introduction see S. P. I. No. 47382.
From La Providencia, Chiapas, Mexico. Corms presented by Dr. C. A. Purpus. Received September 12, 1924.

A very handsome Mexican plant, related to the elephant-ear. The leaves are dark bluish green with very dark stems.

For previous introduction see S. P. I. No. 61387.

61596 to 61625—Continued.

61602. **DUBANGA SONNERATIODES** Buch.-Ham. Lythraceae.
A tall, deciduous tree from subtropical regions in northeastern India; the light brown wood peels off in thin flakes. The gray, soft, yellow-streaked wood, according to Watt (Dictionary of the Economic Products of India), is used extensively in Bengal and Assam for making tea boxes, as it seasons well, takes a good polish, and does not warp.

61603. **ELAEOCARPS SIKKIMENSIIS** Masters. Elaeocarpaceae.
A handsome, evergreen tree, native to Sikkim, India, with erect racemes of small, white flowers. The sharp-pointed, serrate leaves are about 8 inches long.

61604. **ENGELHARDTIA SPICATA** Leschen. Juglandaceae.
This Himalayan relative of the walnut is a large, handsome tree, with thick brown bark which contains a large percentage of tannin. The wood shows a beautiful grain and is said not to warp.

61605. **GYNOCARDIA ODORATA** R. Br. Flacourticaceae.
This tree, one of the most common in the Chittagong Hills, was long considered to be the true source of chaulmoogra oil, which is now known to be *Tarakthos carthii*. The seeds of the former species contain neither chaulmoogric nor hydnocarpic acids, according to T. F. Rock (Bulletin 1057, United States Department of Agriculture). The tree is tall and handsome, with dark-green foliage and pendent branches, and may prove of value as a shade tree for the warmest parts of the United States.

For previous introduction see S. P. I. No. 53121.

61606. **HIBISCUS BENGALENSIS** (L.) Kurz *Hibiscus* (Forest Flora of India) the white myrtle. A tall, shrubby climber which is found wild throughout India in ravines and moist places. The thick, smooth leaves are 4 to 6 inches long, and the showy, fragrant flowers, with silky white, fringed petals, are in axillary racemes.

For previous introduction see S. P. I. No. 57886.

61600. **CLEFREORDIPHYLLA MACRUM** (Roxb.) Don. Apocynaceae.
A large climber, native to Bengal and Burma, with milky sap from which a kind of caulthbone is obtained.

For previous introduction see S. P. I. No. 57886.

61601. **DRAKEIRIA SERICEA** G. Don. Papaveraceae.
The branches and leaves of this small Leguminous tree are covered with reddish brown hairs, and the young leaflets are clothed with silky down. The pale-blue flowers are in short, compact, axillary clusters.

61607. **HOLARRHENA ANTIISPERIFICA** (Roth) Wall. Apocynaceae.
An attractive, white-flowered little tree found native throughout India. The soft, white wood is largely used, in India, for carved furniture, and the aromatic bark is employed medicinally as an antidysenteric and anthelmintic, according to Watt (Dictionary of the Economic Products of India).

For previous introduction see S. P. I. No. 53579.

61608. **LAGERSTROEMIA PARVIFLORA** Roxb. Lythraceae.
A tropical timber tree, native to India, closely related to the well-known crape myrtle (*L. indica*). According to Poiriers (Forest Flora of India) the white fragrant flowers, half an inch across, are in terminal or axillary panicles, and the wood is tough, elastic, and durable.

For previous introduction see S. P. I. No. 53582.
A stout-branched, densely hairy tree, commonly about 30 feet high, with large narrowly ovate leaves, slivery hairy beneath and at times a foot long. The small white or pinkish flowers are in spikes. Native to temperate regions of the Himalayas.

For previous introduction see S. P. I. No. 37886.

A small, graceful shrub with opposite, membranous, lance-shaped leaves, and sessile, 2 to 4 flowered spikes of rosy white flowers. It is native in the Sikkim Himalayas near the Nepal border at an altitude of 10,000 feet.

For previous introduction see S. P. I. No. 55856.

A slender plant, closely allied to the honey-suckle, with pale-green leaves and bearing, in the early winter, a profusion of pink flowers, in short axillary spikes. It is native to the subtropical Himalayas at an altitude of 5,000 feet.

For previous introduction see S. P. I. No. 55907.

A tall shrub, with densely silky, acutely angled, zigzag branches and dense umbels of deep-red flowers. It is native to the eastern Himalayas. Cattle and goats are said to be fond of the leaves, according to Watt (Dictionary of the Economic Products of India) as occurring in dense masses, climbing over other plants in the jungle, with the dazzling white flowers resembling patches of snow.

One of the most beautiful of the Himalayan plants, described by Watt (Dictionary of the Economic Products of India) as occurring in dense masses, climbing over other plants in the jungle, with the dazzling white flowers resembling patches of snow.

A tropical relative of the peach, native to Bengal, and described by Hooker as an evergreen tree with narrow oblong leaves, racemes of yellow-green flowers, and dark-purple fruits about an inch in diameter.

A subtropical Rubus, distributed throughout the temperate Himalayas, Burma, Ceylon, and Java. The berries, which vary in color from red and orange to bright, are very palatable and are commonly sold to Europeans in the bazaars of British India. Introduced for horticulturists experimenting with small fruits.

An attractive, autumn-flowering composite from the Himalayas, with a woody stem and climbing habit. The yellow flowers are in few-flowered loose panicle-like clusters. Because of its rustic beauty, its habit of flowering in October, this plant is a very desirable ornamental.
61596 to 61625—Continued.
61624. TERMINALIA TOMENTOSA (Roxb.) Wight and Arn. Combretaceae.

The tropical almond (Terminalia catappa) is one of the most popular trees in southern Florida, where it is extensively planted as an ornamental shade tree. This closely related Asiatic species, found in many parts of India, is described by Brandis (Forest Flora of India) as a large tree, 50 to 100 feet tall, with hard, leathery leaves 5 to 9 inches long and erect, terminal racemes of dull-yellow flowers. The tree appears to thrive best in India in heavy, binding soils. The dark-brown wood is valued to thrive best in India in heavy, binding soils. The dark-brown wood is valued.


An ornamental, tropical grass, 8 to 10 feet high, which grows wild in the mountainous regions of northern India. The great masses of steel-gray inflorescences give the huge clumps a handsome appearance during about four months of the year.

61626 to 61632.

From Panama. Seeds collected by David Fairchild, Bureau of Plant Industry. Received August 23, 1924.

61626. CHAMAPORNA sp. Phoenicacese. Palm.

Several of the palms of this genus are attractive ornamentals. This one is said by Doctor Fairchild to be slender and of graceful habit.


A wide spreading, low palm which grows in damp situations. It is closely related to the African oil palm (Elaeis guineensis), and a clear oil is extracted from the kernels in small quantities by the natives, who prize it highly for cooking.

For previous introduction see S. P. I. No. 53589.

61628. INGA RUPESCENS Benth. Mimosaee. A tropical tree with acacia-like foliage and small heads of white flowers with showy red stamens. Native to Panama.


Unlike most palms, this Brazilian species has entire leaves, which become about 30 feet in length and 5 feet in width. The trunk is erect, ringed, and unarmed, and 15 to 20 feet high. The natives of Brazil use the immense leaves of this palm for thatching their huts and also for making a coarse cloth.

For previous introduction see S. P. I. No. 45087.

61630. PRIORIA COPAIFERA Griseb. Cselpiniacae. A large, handsome tree, native to central and northern South America, which yields a resin known commercially as balsam of copalba, according to Pittier (Plantas Usuales de Costa Rica).

For previous introduction see S. P. I. No. 47908.

61626 to 61632—Continued.

61631. RHEEDIA LATERIFLORA L. Clusiaeae. Rice.

The "hatstand tree" is a small tree, about 10 feet high, common in the woods of the island of Trinidad. It is noted for the regularity of its branching, and is frequently cut, fastened in a heavy base, and used as a hatstand.

For previous introduction see S. P. I. No. 45604.

61632. STERCULIA sp. Sterculiaceae.

A number of sterculias are attractive shade trees, adapted for growing in the warmer parts of the United States. This one, sent in from Panama, will be grown for its possible ornamental value.

61633. ORYZA SATIVA L. Poaceae. Rice.

From Manila, Philippine Islands. Seeds presented by H. E. Fernandez. Received September 15, 1924.

Introduced for rice-breeding experiments.

61634 to 61695.

From Union of South Africa. Seeds collected by H. L. Shantz, Bureau of Plant Industry. Received August, 1924. Notes by Doctor Shantz.

61634. AESCHYNYMONE ALAPHIBOXYLON (Guill. and Perr.) Taub. (Herminiera elaphroxyylon Guill. and Perr.) Fabaceae. Ambassa.

No. 240a. Lake Nyasa. April 22, 1924. This bush forms the typical tree in the marshy lands and papyrus swamps about the central African lakes and is abundant in the upper Nile region. The plant has light foliage similar to that of the ordinary acacia, but differs in having very large petalike, orange-yellow flowers. It forms at times a trunk 10 inches in diameter, and the wood is exceedingly light, a log 10 feet long weighing only a few pounds. Along the upper Nile it is used extensively in making rafts and huts, and should be valuable in a great many ways.

61635. ALOE ZEBRINA Baker. Liliaceae.

No. 416. Near Nyamandslova, southern Rhodesia. June 12, 1924. An aloe, grown on swamp land, which blooms during the drought period. The very showy flower spike rises from a relatively small rosette.

61636. ANTHOSCHMIDTIA sp. Poaceae. Grass.

No. 245. April 23, 1924. Mixed grass seed from Monkey Bay, Nyasaland. All are sand grasses, grown in a relatively arid country.

61637. ARIBESTA sp. Poaceae. Grass.


61638. ASPARAGUS sp. Convallariaceae.


61639. BAHIANA sp. Iridaceae.

No. 442. Bathoe, Bequamaland. June 16, 1924. From semiarid grasslands. An attractive iridaceae, with flowers. The corms are eaten by baboons.

No. 409. Tjolotjo, Southern Rhodesia. June 12, 1924. Tsama melon, found growing under native conditions, furnishes water for travelers and wild game in the Kalahari Desert. It maintains itself in a wild state. Every effort should be made to establish this plant in the Southwest, where it would increase the value of the native range. It might also do well at the edge of the large sand-dune areas in California, Arizona, and New Mexico.

61641. CLEMATIS LEONCUM. Curbitacese. Watermelon.

No. 354. Portuguese East Africa, between M'Khoma and Zomba. May 12, 1924. An herbaceous clematis, with greenish white flowers and white fruit clusters, which grows about 3 feet high, probably from a perennial root. Abundant in grasslands which are burned over each year at the end of the dry season.

61642. COMBRETUM PRIMIGENIUM Marloth. Combretaceae.


61643. COPIAVA COLEOSPERMA (Benth.) Kuntze (Copopera coleosperma Benth.) Cassipalineae.

No. 417. Victoria Falls, Southern Rhodesia. June 13, 1924. A beautiful, evergreen tree of excellent form and foliage, reaching a height of 60 feet. The tree is very attractive and would make a good ornamental in the semi-arid South and West. It could also be accepted as typical of the sorghums grown in this section of Africa.

61644. COPIAVA MOPANE (Kirk) Kuntze. Cassipalineae.

No. 414. Tjolotjo, Southern Rhodesia. June 12, 1924. One of the most valuable timber trees, because of the resistance of the wood to attacks of termites. It grows in a semiarid country, where water is available and there are no heavy rains. The leaves are heavily lacquered and deep shiny green. The seeds look very much like the leaves. Native names are mopani, ili pani, mwanga, or mu wani.

61645. CRACCA sp. Fabaceae.


61646. CROTALARIA sp. Fabaceae.


61647 and 61648. FLACOURTIA INDICA (Burm. f) Merr. (F. ramonch i L'Herit.) Flacourtiaeae. Ramontchi.

61647. No. 199. April 12, 1924. Fruits small like red-fleshed plums but with several seeds. This sample was found in the market at Dar es Salaam.

61648. No. 360. Tjolotjo, Southern Rhodesia. June 11, 1924. A small plum-like fruit, with several seeds. The fruit is very good when eaten out of hand, and excellent for making jelly. The tree is very attractive and would make a good ornamental in the semiarid South and West. It could also be used as a hedge plant.

61649. GLADIOLUS sp. Iridaceae.


61650. GLADIOLUS sp. Iridaceae.

No. 347. M'Khoma, Nyasaland. May 12, 1924. This is one of the best native types. The plant is tall, and the reddish flowers are of good size.

61651. GREWIA sp. Tiliaceae.

No. 425. Mochudi, Bechuanaland. June 15, 1924. The so-called “Somali” fruit. It is a small bush growing in a semiarid country.

61652. GREWIA sp. Tiliaceae.


61653 to 61673. HOLCUS SORGUM L. (Sorghum vulgare Pers.) Poaceae. Sorghum.

61653 to 61656. Nos. 235 to 238. Between Blantyre, Nyasaland, and the Zambesi. April 22, 1924. Here the natives grow a very tall form of sorghum with large spreading open heads. It is remarkably uniform in height and shape of inflorescence, but there are differences in color. These four heads represent range in type.

61653. No. 235.

61655. No. 237.

61654. No. 236.

61656. No. 238.

61657 to 61667. Nos. 348 to 358. May 15, 1924. The sorghum grown by the natives in this section is a very tall, open-headed type. I have seen none of the closed-head types in Nyasaland. The following numbers, although similar in size of plant and shape of head, differ in color of seed and hull. They may be accepted as typical of the sorghums grown in this section of Africa.


61658. No. 349. White hull and seed.


61660. No. 351. Pink hull and white seed.


61662. No. 353. Similar to No. 352 [S. P. I. No. 61661].

61663. No. 354. This type has a darker hull than that of No. 352 [S. P. I. No. 61661].

61664. No. 355.


61667. No. 358. Magenta hull and white seed.

61668 to 61672. Nos. 420 to 424. June, 1924. Types of sorghum grown by the Bakaguthula tribe in the semiarid region of Bechuanaland. Sorghum constitutes their principal food.
61674. HOLCUS SORGHUM VERTICILLIFOLIUS (Steud.) Hitch. Poaceae. 
Tabuci grass.

No. 306. May 8, 1924. Wild sorghum variety, very abundant on lowlands above southern end of Nyasaland, Domira Bay.

61675. HYPERICOPHYLLUM sp. Asteraceae.


61676. MANISURIS sp. Poaceae. Grass.

No. 201. Beira, Portuguese East Africa. April 29, 1924. A very low-growing, small-seeded variety. Grown at Beira on drier land. It has a peculiar odor and may be valuable.

61677. ORYZA SATIVA L. Poaceae. Rice.

No. 206. May 3, 1924. An important crop at the edge of the desert. There are many types grown in the area; it should be of value as an ornamental.

61678. PANICUM MADAGASCARIENSE Spreng. Poaceae.

No. 294. Tjolotjo, Southern Rhodesia. June 12, 1924. A rather delicate variety with showy flowers; it should be of value as an ornamental.

61679. PANICUM sp. Poaceae. Grass.

No. 388. Tjolotjo, June 11, 1924. One of the grasses which is most successful in the semiarid agriculture of the eastern Kalahari.

61680. POGONANTHRA sp. Poaceae. Grass.

No. 418. Tjolotjo, Southern Rhodesia. June 11, 1924. Mixed grass seed of the type which forms the grass cover on the eastern edge of the Kalahari Desert.

61681. SESAMUM ANGOLENSE Weiw. Poaceae.


61682. SOLANUM TUBEROSUM L. Solanaceae. Potato.

No. 296. Livingstonia. April 30, 1924. This appears to be a smaller-flowered type of wild sesame than is found in Central Africa.


No. 209a. April 23, 1924. A rather small plant about 3 to 6 feet high, abundant along the road south of Fort Johnston, Nyasaland.

61684. SPECIALIS sp. Poaceae.


61685. SPOROBOLUS sp. Poaceae. Grass.

No. 298. Beira, April 22, 1924. The golf course at Beira is made up of this grass. When closely clipped it makes a good turf. Most of the golf course is near tidewater level.

61686. STERCULIA sp. Sterculiaceae.

No. 240. Fort Johnston, April 22, 1924. A large white-barked tree with very soft wood. The leaves are somewhat like those of the cotton plant. The pods are large, resembling those of Asclepias, but with stinging hairs around the aril, which is bright red. It is sometimes called the "fever" tree and is locally known as N'goza. The seeds are said to be picked to form a powder used as snuff.

61687. TERMINALS SERICEA Burchell. Combretaceae.

No. 407. Tjolotjo, Southern Rhodesia. June 11, 1924. A well-shaped ornamental tree, suitable for a semiarid country: the yellow wood is of excellent quality and the most valued of any in the region. Bark cloth of poor quality is made from the bark. The tree is known under the native names of Umangwe, M'Busu, M'Tarataka, etc.

61688. THEMEDA sp. Poaceae. Grass.

No. 443. Ramanti, Bechuanaland. June 16, 1924. Mixed grass seed from the acacia-tall-grass belt, which is probably the most successful grazing region of Africa.

61689. TRACHYSANTHUS sp. Commelinaceae.

No. 263. Livingstonia. April 27, 1924. A very delicate variety with showy flowers; it should be of value as an ornamental.

61690 to 61692. TRICHOLENA KOSEA Nees. Poaceae.


No. 294. Livingstonia. April 30, 1924. Wheat grown on the highlands above Nyasaland. It yields fairly well here. Much of the flour used here is produced on the highlands.


Nos. 389 and 419-b. Tjolotjo, Southern Rhodesia. June 12, 1924. An important crop at the edge of the desert. There are many types grown in the same field. An effort was made to include all types in the sample.

From Leningrad, Russia. Seeds presented by Prof. N. I. Vavilov, Director of the Bureau of Applied Botany and Plant Breeding. Received September 24, 1924. Notes by Professor Vavilov.

### Seeds and Plants Imported

**61696 to 61725.**

From Leningrad, Russia. Seeds presented by Prof. N. I. Vavilov, Director of the Bureau of Applied Botany and Plant Breeding. Received September 24, 1924. Notes by Professor Vavilov.

- **61696 to 61714.**
  - **GOSSYPIUM spp.** Malva-ceae. Cotton.
    - **61696.** *GOSSYPIUM sp.* *King.*
    - **61697.** *GOSSYPIUM sp.*
    - **61698.** *GOSSYPIUM sp.* No. 705.
    - **61699.** *GOSSYPIUM sp.* Minus.
    - **61700.** *GOSSYPIUM sp.* No. 755.
    - **61701.** *GOSSYPIUM sp.* Guzomochi Bokhara.
    - **61702.** *GOSSYPIUM sp.* No. 69. Turkestan Selection Station.
    - **61703.** *GOSSYPIUM sp.* No. 48.
    - **61704.** *GOSSYPIUM sp.* No. 182.
    - **61705.** *GOSSYPIUM sp.* No. 182. Turkestaji Selection Station. Clear rowed.
    - **61706.** *GOSSYPIUM sp.* Naviotzkii.
    - **61707.** *GOSSYPIUM sp.* No. 48.
    - **61708.** *GOSSYPIUM sp.* Fergan.
    - **61709.** *GOSSYPIUM sp.* No. 180.
    - **61710.** *GOSSYPIUM sp.* No. 750.
    - **61711.** *GOSSYPIUM sp.* No. T-509.
    - **61712.** *GOSSYPIUM sp.* No. 455-A.
    - **61713.** *GOSSYPIUM sp.* No. 452-A.
    - **61714.** *GOSSYPIUM sp.* Weber.

- **61715 and 61716.** *HORDEUM VULGARE PAL-LIDUM* Seringe. Poaceae. Six-rowed barley.
  - **61715.** No. 62.
  - **61716.** No. 63.

- **61717 to 61719.** *ORYZA SATIVA L.* Poaceae. Rice.
  - **61717.** No. 10. Bokhara.
  - **61718.** 16755-1922. Turkestan Republic. Shala.
  - **61719.** 170-F. Turkestan. Shala.

### 61726 to 61737.**

From South America. Seeds collected by H. L. Westover, Bureau of Plant Industry. Received July 14, 1924. Notes by Mr. Westover.

- **61726.** Near Lampa, Chile. May 13, 1924. Provence alfalfa, produced on the estate of Señor Marticorena, who is a very large producer of this seed. He procured the seed from France a few years ago and has made every effort to keep it pure.
- **61727.** Santa Ines, Chile. June 5, 1924. Seeds from an unusually vigorous plant found on the estate of Salvador Izquierdo.
- **61728.** June 1, 1924. From the Huasco Valley, about 12 miles from Alta del Carmen. Seed coming from this district, which is very warm, is regarded very highly.
- **61729.** April 7, 1924. Procured from Bridger Bros., Buenos Aires, and said to have been produced in the northern part of Argentina, where the climate is very mild.
- **61730.** March 31, 1924. Seeds collected from a plant near Lupan de Cuyo, Mendoza, Argentina.
- **61731.** May 31, 1924. From near Mendoza, Argentina.
- **61733.** March 26, 1924. Seeds produced on the estate of the Chapman brothers, near Enrique Lavalle, in the western part of the Province of Buenos Aires.
- **61734.** April 7, 1924. From Colonia Alvear, Mendoza, Argentina, a region comparatively free from frost.
- **61735.** June 7, 1924. Seeds obtained from Williamson & Co., Santiago, Chile. This seed is said to have been grown in the Huasco Valley, and many of the alfalfa growers in Chile use seed only from this source, as they claim that it produces more and better hay than seed from other parts of Chile.
- **61736.** June 20, 1924. Purchased from the seed store at Mollendo, Peru. This seed, which should be similar to our Smooth Peruvian, is said to have been produced at Candarava, about 30 leagues from Mollendo, at a high altitude.
- **61737.** Pisco, Peru. June 21, 1924. Purchased from the market. Probably grown near the coast and should be very similar to Hairy Peruvian.
INDEX OF COMMON AND SCIENTIFIC NAMES

Acacia catechu, 61593.
Acacia cavena, 61339.
Acorn, Dioscorea alata, 61909.
Acrocomia sellowiana, 61355.
Adenanthera microsperma, 61778.
Adlay, Coix lacryma-jobi ma-yuen, 61235-61237.
Aeluropus littoralis, 61388.
Asparagus sp., 61638.
Aristida sp., 61637.
Artocarpus communis, 61391.
Babiana spp., 61209, 61639.
Bambusa polymorpha, 61579.
Bassia scoparia, 61246.
Bavanda populnea, 61593.
Blackberry, Colombian, Rubus macrocarpus, 61065.
Blood lily, Haemanthus katherinae, 61248.
Boechera macrophylla, 61597.
Boulusia megapotentia, 61093.
Breadfruit, Artocarpus communis, 61290.
Brownia dantoniace, 61400.
Cajanus, 61907.
Brunsvigia josephinae, 61245.
Buckwheat, Fagopyrum, 61065.
Canna indica, 61252.
Chenopodium rubrum, 61252.
Chicory, 61212.
Citrus medica, 61599.
Chonemorpha macrophylla, 61356-61365, 61407.
Claytonia, 61018-61020.
Coffee, See Coffea spp.
Coffea bukobensis, 61455.
Coffea robusta, 61460.
Coffea arabica, 61540.
Cochrania sp., 60985-60987, 61374-61377.
Coriandrum sativum, 61321, medica, 61200.
Crotalaria, 61087.
Cryptomeria japonica, 61487, 61488.
Cryptostegia grandiflora, 61425.
Cupressus funebris, 61411.
Cryptomeria japonica, 61487, 61488.
Cuphea, 61489.
Cupressus funebris, 61411.
Cupressus funebris, 61499.
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This inventory is a contribution from

**Bureau of Plant Industry**

William A. Taylor, Chief.

**Office of Foreign Plant Introduction**

David Fairchild, Senior Agricultural Explorer, in Charge.

34